THE RESOURCES AGENCY OF CALIFORNIA

Department of Water Resources

BULLETIN No. 133

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

MARCH 1964

HUGO FISHER
Administrator
The Resources Agency of California

EDMUND G. BROWN
Governor
State of California

WILLIAM E. WARNE
Director
Department of Water Resources

State of California
THE RESOURCES AGENCY OF CALIFORNIA
Department of Water Resources

BULLETIN No. 133

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

MARCH 1964

HUGO FISHER
Administrator
The Resources Agency of California

EDMUND G. BROWN
Governor
State of California

WILLIAM E. WARNE
Director
Department of Water Resources

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

TABLE OF CONTENTS (continued)

TABLES

TABLE OF CONTENTS (continued)

FIGURES

APPENDIXES

PLATES

(Plates follow Appendix D)

AUTHORIZATION

This investigation was conducted in accordance with the provisions of Section 229 of the California Water Code.

> "Section 229. The department, either independently or in cooperation with any person or any county, state, federal or other agency, to the extent that funds are allocated therefor, shall investigate conditions of the quality of all waters within the State, including saline waters, coastal and inland, as related to all sources of pollution of whatever nature and shall report thereon to the Legislature and to the appropriate regional water pollution control board annually, and may recommend any steps which might be taken to improve or protect the quality of such waters."

EDMUND G. BROWN
GOVERNOR OF CALIFORNIA

HUGO FISHER
ADMINISTRATOR
RESOURCES AGENCY

WILLIAM E. WARNE
Director of Water Resources

B. ABBOTT GOLDBERG
Chief Deputy Director

REGINALD C. PRICE
Deputy Director Policy

NEELY GARDNER
Deputy Director Administration

ALFRED R. GOLZÉ
Chief Engineer

ADDRESS REPLY TO
P. O. Box 388
Sacramento 2, Calif.

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
1120 N. STREET, SACRAMENTO

May 18, 1964

Honorable Edmund G. Brown, Governor
and Members of the Legislature of
the State of California

Gentlemen:

I have the honor to transmit herewith Bulletin No. 133 of the State Department of Water Resources, "Folsom-East Sacramento Ground Water Quality Investigation."

This investigation was undertaken in cooperation with other State and local agencies and industries to insure that waste disposal from the rapid residential and industrial development east of Sacramento had not affected ground water quality in the area. This report discusses many aspects of ground water quality and establishes present quality levels as measured during the course of the investigation. These data will serve as a base line against which to measure the effects of future development.

The results of this study have shown that present waste disposal practices in the area have not affected the ground water quality and the water pumped within the area is satisfactory for all beneficial uses. Continuation of the Department of Water Resources' ground water monitoring program, together with the waste dischargers' monitoring program being conducted for the Water Pollution Control Board, should be instrumental in insuring the future protection of this ground water resource.

Sincerely yours,

William E. Warne

Director

CALIFORNIA WATER COMMISSION

RALPH M. BRODY, Chairman, Fresno

WILLIAM H. JENNINGS, Vice Chairman, La Mesa

JOHN W. BRYANT, Riverside

JOHN P. BUNKER, Gustine

IRA J. CHRISMAN, Visalia

JOHN J. KING, Petaluma

EDWIN KOSTER, Grass Valley

NORRIS POULSON, La Jolla

MARION R. WALKER, Ventura

------- 0 -------

WILLIAM M. CARAH
Executive Secretary

ORVILLE ABBOTT
Engineer

STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

DELTA BRANCH

Carl A. Werner . . . . Branch Chief

Willard R. Slater . . . . Chief, Special Investigations Section

This investigation was under the supervision of

Edward E. Whisman . . . . Chief, Water Quality Unit

This investigation was conducted by

Richard D. Lallatin . . . . Water Resources Engineering Associate

Assisted by

Donald R. Andres . . . . Assistant Sanitary Engineer
Dean C. Nitz . . . . Junior Civil Engineer

George Curtin . . . . Chief, Geology Unit
Dean R. Schnaible . . . . Associate Engineering Geologist

Jack H. Lawrence . . . . Chief, Land and Water Use Unit
Robert R. McGill, Jr. . . . . Associate Land and Water Use Analyst

This report was written by

Robert C. Lunch . . . . Research Writer

ACKNOWLEDGMENTS

Considerable assistance was received from the Aerojet-General Corporation and the Mather Air Force Base during this investigation.

In addition, the cooperation of the following public and private agencies is gratefully acknowledged:

Douglas Aircraft Company

Natomas Water Company

Citizens Suburban Water Company

Natomas Dredging Company

United States Bureau of Reclamation

United States Geological Survey

State Department of Public Health, Bureau of Sanitary Engineering

State of California, Central Valley Regional Water Pollution Control Board (No. 5)

County of Sacramento

D. Hedman and Company

Wayne Drilling Company

Cornelius Drilling Company

Grateful acknowledgement is also made to the many property owners who granted department personnel access to their wells and well records.

CHAPTER I. INTRODUCTION

The Folsom-East Sacramento area, shown on Plate 1, "Area of Investigation," lies to the east of the City of Sacramento, and south of the American River. While the area is outside the city limits it is sociologically and demographically a part of the city. Many who work in the industrial plants within the area of investigation live in the city or its surrounding suburbs. Many who live within the area of investigation work in the city. Traffic to and from the area moves equally in both directions.

Although Sacramento became a major urban center at the time of the California gold rush, a plentitude of land surrounded the built up areas. Until World War II extensive mounds of dredger tailings, left over from the gold mining of an early day, lay to the east of the city as a waste land suitable only for children playing "wild west." Until the mid 1950's the only development in the area was Mather Air Force Base. Now, in 1964, the area is a barbed-wire, control-towered complex on which giant plants such as Aerojet-General and Douglas Aircraft base their operations. Mather Field covers approximately 6,000 acres of the area.

As industry developed in the area, housing developments kept pace. Mather Field was the centroid of the first large development. Smaller developments soon followed and the pace of new residential construction still has not slackened. The 1960 census showed a total of

23,332 persons in the area. Some three years later it was informally estimated that this figure had increased to 30,000.[1/]

The water used by both industrial and domestic users is primarily ground water of high quality. As development proceeded, the industrial and domestic wastes generated were disposed of within the same ground water basin. The control of these wastes is under the jurisdiction of the Central Valley Regional Water Pollution Control Board (No. 5).

While there was no direct evidence of degradation of the ground water supply because of the introduction of waste waters, by 1961 logic forced the inference that if waste waters continued to be introduced into the basin such degradation would be inevitable. One of the larger waste dischargers had in fact, requested waste discharge requirements from the Pollution Control Board some time prior to 1961. However, the Pollution Control Board, with very little data at their command, found it difficult to establish waste discharge requirements. In order to obtain additional data on present ground water quality, hydrology, and geology, on which to base waste discharge requirements for this rapidly developing area, the Pollution Control Board requested that a study be undertaken to furnish this information.[2/] Utilization of these data would enable the Pollution Control Board to establish requirements which would insure the continuing protection of ground water quality in this

---

1/ By Phillip Warren, Staff Demographer, Department of Water Resources; based on an estimated average annual increase of 8½%.

2/ Memorandum, October 30, 1961, to the Department of Water Resources from Central Valley Regional Water Pollution Control Board, Subject: Proposed Investigation of the Folsom-East Sacramento Ground Water Basin.

basin and, at the same time, would permit maximum development of this area consistent with the safeguarding of the water supply.

It was therefore proposed that the Department of Water Resources, on behalf of the Pollution Control Board, develop the descriptive data of the area upon which a logical, fair, and equitable set of criteria could be based.

Boundaries of the Area

In order to define the boundaries of the area of investigation it was assumed that any effects waste water might have on the ground water body would be limited to the area south of the American River and west of the impermeable formations comprising the foothill structure of the Sierra Nevada. These formations follow roughly along the line between Ranges 7 and 8 East.[1/] The line between Townships 7 and 8 North, where the U. S. Geological Survey had contoured the depth to fresh water, was chosen as the southern boundary. This same line had been the northern boundary of a former U. S. Geological Survey ground water survey. The western limit of the area was established as the midline between Ranges 5 and 6 East. The area thus defined contains approximately 60,000 acres.

1/ All Ranges and Townships, unless otherwise described, are Mount Diablo Base & Meridian.

Types of Data Collected

Once the area was defined, the investigators set about to develop the data that would be needed. These data fell into six groups:

1. The historic and present quality of ground waters in the various aquifers.

2. Occurrence, direction, and velocity of ground water movement.

3. Areas and sources of recharge of ground water.

4. Occurrence and quality of underlying connate waters in the deeper marine formations.

5. Storage capacity of the ground water basin underlying the area of investigation.

6. Industrial, municipal, and domestic waste disposal practices.

Since ground water is so intimately associated with the subsurface structure, geologic data were gathered. The area had not been thoroughly geologized and literature was scanty and scattered. A field study, therefore, was conducted, which included a drilling program. Chapter II presents a summary of the findings of this program. The detailed information gathered during the field studies is included in Appendix A.

CHAPTER II. GEOLOGY

The Folsom-East Sacramento area lies within the structural trough of the Sacramento Valley. The sedimentary formations within this structural trough control the movement and quality of ground water in and through the area. Plate 2, "Areal Geology," shows the surface distribution of the formations. Ground water within these sedimentary formations ranges from good to poor quality. Beneath the sedimentary formations are the nonwater-bearing metamorphic and granitic rocks which crop out in the bedrock series of the Sierra Nevada. As shown on Plate Nos. 3 and 4, "Geologic Section A-A,' B-B,' and C-C,'" the formations in the area dip toward the west. Fresh ground water is found in the Victor, Laguna, and Mehrten Formations which extend from ground surface to about 1,000 feet in depth. The bottom contact of the Mehrten Formation is considered to be the lower boundary of the fresh ground water zone. Below the Mehrten Formation are the relatively impermeable Ione, Valley Springs, and Chico Formations. The latter formation is of marine origin and contains small quantities of poor quality water. beneath the Chico Formation are the impervious metamorphic and granitic rocks which make up the Sierra Nevada bedrock series.

The water-bearing characteristics of the various formations have been determined almost entirely through interpretation of well data. These data show that the deeper wells generally have greater pump discharges and higher specific capacities. The laguna and Mehrten Formations are the main producers of domestic, irrigation, and industrial ground water. Wells in the Victor Formation have the highest average specific capacity of wells in the various formations in the area, but because of the limited depth of the Victor sediments, production there from is from the other fresh water-bearing formations.

The tabulation below summarizes the characteristics of wells pumping fresh ground water from various formations in the area.

	FORMATION		
	Victor	Laguna	Mehrten
Average Well Depth (feet)	204	339	416
Gallons Per Minute (gpm)	659	898	1098
Specific Capacity	58	35	38

The ground water-bearing formations are naturally recharged by infiltration of rain water, irrigation water, and seepage from the American River Numbus Reservoir. Previous dredging operations in the area imported a considerable amount of water for the hydraulic dredges. Most of this water was allowed to percolate, thus raising the ground water level at this time.

A more detailed discussion of the geology of the area of investigation is included as Appendix A of this report.

CHAPTER III. HYDROLOGY

Many factors affect the quality of the ground waters within a geographic area. Not the least of these is the water dynamics within the area. Water may be brought to the area on the surface or through underground sources. Some of the surface water seeps into the ground and some runs off through rivers and channels. As man builds on the land, he reduces the area of infiltration, diverting the waters which might have percolated to ground water and increasing the runoff through the natural or man-made watercourses.

In addition to changing the original hydrologic balance of the area, man changes the water itself. Chemicals or solids may be added to the water; it may be used repeatedly for irrigation and thus increase its content of dissolved solids; or the original dissolved solids may be removed.

Lands Within the Area

The rates and amounts of percolation to ground water depend upon the types, extent, and permeability of the soils which receive the waters. Within the Folsom-East Sacramento area there are three major soil classes:

1. Alluvial soils which are deep and permeable.
2. Hardpan lands which are quite impermeable.
3. River wash and dredger tailings having a wide range of permeabilities.

Urban expansion, however, is not inhibited by the percolation characteristics of the land. The hardpan soils will ultimately require surface drainage facilities but this is not expected to be an impediment to almost complete urbanization of the area. The dredger tailings are highly permeable, and will require treatment before serving as the foundations of structures heavier than private residences. It is doubtful, however, that land permeability will even enter into the calculations of land developers.

Land Use Pattern

The land use pattern within the area of investigation has exhibited a startlingly rapid changeover during the last two decades. An area once used primarily for dry range grazing and row crop agriculture is now becoming another appendage to the general Sacramento urban complex. This change in the land use pattern brings with it a markedly altered water regime. Lands that were once productive permeable agricultural lands are now covered by rooftops or other impermeable materials. As long as the land use remains in agriculture, rainfall and high quality waters used in irrigation can easily percolate to the water-bearing strata beneath. Today, the open permeable area is being rapidly reduced, and the percolant from urban and industrial usage may seriously lower the quantity and quality of the flows returning to the ground water reservoir.

As urbanization of the area increases, it is expected that land values and accompanying taxes will increase concurrently. For this reason agriculture, as it exists today, will undoubtedly not be able to compete for the use of lands in this area in the future. It is reasonable to expect that by the end of the century no agricultural lands will be left in the area.

Land Use Survey

A land use survey conducted in 1961 indicated that nearly 5,400 acres of land within the Folsom-East Sacramento area were then being irrigated. Assuming a water requirement for irrigation of three feet per acre per year, the total use of both ground and surface water for irrigation would have been about 16,200 acre-feet annually. The results of the 1961 land use survey are shown in Table No. 1, on Page 10.

TABLE NO. 1

PATTERN OF LAND USE, 1961

(In Acres)

Irrigated Lands	Acres
Forage Crops	3,570
Truck Crops	400
Field Crops	220
Orchard	770
Vineyard	410
Subtotal	5,370
Urban Lands	
Military	6,060
Commercial	90
Industrial	1,490
Residential	1,450
Miscellaneous	670
Subtotal	9,760
Vacant Lands	44,000
TOTAL	59,130

As the irrigation requirement diminishes, the need for municipal and industrial water will increase. Studies indicate that before the year 2,000 agriculture will have ceased in the Folsom-East Sacramento area and all available water will be utilized by industry and municipalities. Figure No. 1 shows the expectation graphically.

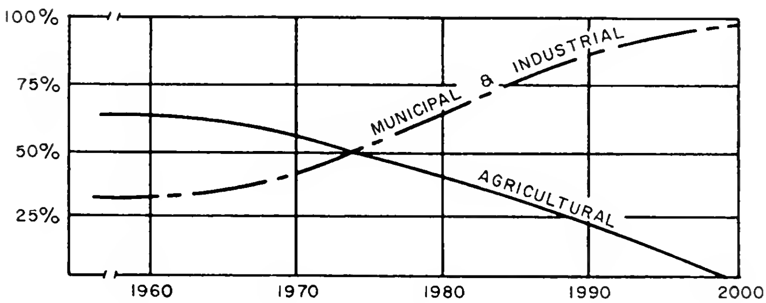


Figure I, CHANGES IN WATER USE THROUGH TIME

Soil Classification Survey

A soil classification survey of the area was conducted during the summer and fall of 1962. The results of this survey are shown in Table No. 2, "Classification of Soils." The soils within the area can be classified by permeabilities. Highly permeable materials are composed largely of coarse river wash and dredger tailings. Permeable materials include most of the recent alluvial soils that are now under irrigation, generally within one mile of the American River. Slightly permeable materials include the claypan-hardpan terrace soils found extensively south of Highway 50. The soil classification survey showed a close correlation between permeabilities and geologic units shown on Plate No. 2.

TABLE NO. 2

CLASSIFICATION OF SOILS

Class	Acreage	Percent
Highly Permeable Materials	17,770	30
Permeable Materials	3,270	6
Slightly Permeable Materials	38,090	64
TOTAL	59,130	100

Ground Water

Ground water is available throughout the entire area of investigation, occurring in four geologic formations--the Mehrten, Laguna, Victor, and Recent alluvium. All four formations contain unconfined ground water, though confined ground water does occur locally in the Mehrten and Laguna Formations. Unconformable contacts exist between several of these formations, but the character of the contacts is such that they do not impede the movement of ground water.

Storage Capacity

The availability of ground water depends, in part, upon the amount stored. The net storage depends upon inflow, outflow, pumping, and other hydrologic factors.

Before the storage capacity of an area can be determined, or estimated, certain data must be known, or assumed. These include specific yield,[1/] depth, and extent of water-bearing strata. As a first step in computing the ground water storage capacity of the Folsom-East Sacramento area, the area within each section was measured to the nearest five acres. Twenty-foot depth intervals were established, and each interval was classified in one of five materials categories. The categories were taken almost entirely from drillers' logs, which in many instances had entries simply as gravel, sand, and clay. In actual fact, these three types include many subtypes and combinations of types. For practical purposes, it was

---

1/ Specific yield is defined as the ratio of the volume of water drained by gravity from a saturated sample to the total volume of the sample, expressed as a percentage. It is assumed in this report, for example, that a cubic foot of saturated gravel would yield 25 percent of a cubic foot of water.

necessary to restrict the driller's log entries into five general classes and assign a specific yield to each. The classes, and the specific yield assigned to each were:

TYPE	SPECIFIC YIELD
Gravel; or sand and gravel mixed	25%
Sand, not packed	20%
Sand packed tight or hard	10%
Cemented gravel, clay and gravel, sandstone or silt	5%
Clay	3%

Each of these terms, it should be emphasized, included as many as 19 different designations used by drillers, which might or might not refer to the same material. The average specific yield of each depth zone, to a depth of 420 feet, was then calculated for each section.[1/] While well depths varied from less than 150 to about 600 feet, few water wells has been drilled below 400 feet and data pertaining to lower depths were scanty. In many cases specific yields and capacities below the 400 foot depth were extrapolated from data developed through the 0 to 400 foot zone. A summary of average specific yields from each horizontal layer from 0 to 420 feet is presented in Table No. 3. The complete data, from which the averages were derived, are included in Appendix B.

The storage capacity for each section was calculated from the specific yield for that section. A summary of the storage capacity of each layer is presented in Table No. 4. The complete data are included in Appendix B.

1/ Section lines were taken from U. S. Geological Survey $7\frac{1}{2}$ minute quadrangle sheets.

TABLE NO. 3

AVERAGE SPECIFIC YIELDS AT VARIOUS DEPTHS

Depth Interval (feet)	Specific Yield (percent)	Depth Interval (feet)	Specific Yield (percent)
0-20	11	220-240	9
20-40	12	240-260	7
40-60	11	260-280	6
60-80	11	280-300	6
80-100	9	300-320	6
100-120	9	320-340	6
120-140	7	340-360	6
140-160	7	360-380	7
160-180	6	380-400	7
180-200	8	400-420	7
200-220	8		

TABLE NO. 4

STORAGE CAPACITIES OF SUBSURFACE ZONES

WITHIN AREA OF INVESTIGATION

Depth Interval (feet)	Storage Capacity (acre-feet)	Depth Interval (feet)	Storage Capacity (acre-feet)
0-20	138,500	220-240	101,500
20-40	146,400	240-260	83,400
40-60	124,700	260-280	69,100
60-80	118,200	280-300	62,100
80-100	112,700	300-320	70,800
100-120	103,100	320-340	78,600
120-140	86,700	340-360	67,300
140-160	92,300	360-380	74,500
160-180	90,000	380-400	87,600
180-200	99,000	400-420	85,300
200-220	93,000		

Total Storage Capacity -- 1,985,000 acre-feet

Change of Storage

Calculations of change of ground water storage depend upon measurements of the fluctuation in depths to ground water under different seasonal and hydrologic conditions. Such measurements are also used to calculate rates of change in storage, direction of ground water flow, and slope of the ground water surface. To obtain these data an extensive well canvass was conducted throughout the area of investigation to locate and determine the construction and depth of all wells. Upon completion of this canvass, a number of wells were selected that would best allow the measurement of water levels to indicate the direction of movement of ground water and the gain in, or loss of, stored water. These wells are listed in Table No. 5 (at the end of this report). Locations of the wells selected for measurement are shown on Plate No. 1.

To provide a basis for comparison, elevations of the reference points used for measurements were determined by differential leveling methods. All water level measurements were converted to mean sea level, U. S. Geological Survey datum. Prior to this investigation, the U. S. Bureau of Reclamation had made ground water measurements for a portion of the investigated area. The lines of equal elevation of the ground water determined from these data are shown on Plate No. 5, "Lines of Equal Elevation of Water in Wells, Spring 1946 and Spring 1953."

Measurements of the water level elevations were made during the spring of 1962 and spring of 1963 and are presented in Plate No. 6, "Lines of Equal Elevation of Water in Wells, Spring 1962 and Spring 1963."

The measurements made of the depth to ground water in the spring of 1963 are presented in Plate No. 7, "Lines of Equal Depth to Water in Wells, Spring 1963."

A comparison of the 1953 ground water elevations to the 1963 ground water elevations shows a general decline throughout the entire area of investigation, with the least amount of change occurring where the American River is influencing the recharge. The greatest change, approximately 20 feet, occurs in the Rancho Cordova area where intense urban development has taken place and in the southeastern portion of the area where recharge is very minor. These changes are illustrated on Plate No. 8, "Lines of Equal Change of Elevation of Water in Wells, Spring 1953 to Spring 1963."

During the decade 1953-63, the ground water storage was reduced approximately 67,000 acre-feet, or an average of 6,700 per year. The rate of reduction has apparently been intensified during later years. Between the time that ground water measurements were made in the spring of 1962 and the spring of 1963, ground water storage was reduced by approximately 11,500 acre-feet. This reduction, at an accelerated rate, reflects the increased urban and industrial use of water within the area coupled with a decreasing amount of recharge. The reduced recharge is probably due mainly to the cessation of dredger operations, but also reflects the decrease in land available to receive precipitation as a result of urban and industrial development.

Ground Water Withdrawals

The recent urban and industrial expansion within the area of investigation shown on Plate No. 9, "Urban and Industrial Developments, 1963," requires that a firm and plentiful supply of water be available now and in the future. Though surface water is available, the largest supply is from ground water principally because ground water of high quality is available throughout the area and extensive conveyance and treatment facilities are not needed. Table No. 6 shows ground water extractions by all users during the 1961-62 fiscal year.

As urbanization developed within the area of investigation, water companies were formed. Large corporations and public groups, such as Aerojet-General Corporation and Mather Air Force Base, developed their own ground water supplies. Individuals and small industrial users outside the area served by the water companies usually developed their own supplies and ordinarily did not keep records of the amount withdrawn. The quantity pumped outside the service areas of the organized water companies was determined by listing and estimating each individual use.

The amount of water used for agricultural purposes was determined by using an estimated figure of 3.0 feet per acre per year on 5,370 acres of irrigated lands within the area of investigation. Agriculture presently requires about twice the amount of water as all other uses combined require. This situation will change, however, as urbanization increases at the expense of agriculture.

TABLE NO. 6

AMOUNTS OF GROUND WATER EXTRACTED

(July 1, 1961 - June 30, 1962)

	Million Gallons Per Day	Acre-Feet Per Year
Water Companies	7.5	8,370
Individual residences	0.6	670
Industrial (outside of the service area)	0.2	220
Agricultural	14.4	16,110
TOTAL	22.7	25,370

Table No. 7 shows the amounts of ground water withdrawn from the basin by the four largest users in the area from July 1, 1961 to June 30, 1962. The areas served by the users listed in Table No. 7 are shown on Plate No. 10, "Sewer Maintenance and Water Service Districts."

TABLE NO. 7

GROUND WATER WITHDRAWALS BY FOUR LARGEST USERS

(July 1, 1961 to June 30, 1962)

User	Yearly Withdrawal (acre-feet)
Natomas Water Company 1/	3,138
Citizens Suburban Water Company	1,027
Mather Air Force Base	2,801
Aerojet-General Corporation	1,400 2/
TOTAL	8,366

Recharge

If a ground water body is not to be depleted, there must be a balance between the amount of water withdrawn and the amount replaced. It is quite obvious that if more water is removed than replaced, the water table will drop. Ground water replenishment for the area of investigation occurs from infiltration of rainfall, surface streams, unconsumed applied water, and imported water.

Precipitation. The amount of infiltration from precipitation, a major source of recharge to ground water, depends on many factors such as precipitation intensity, soil characteristics, and vegetative cover.

Average annual precipitation in the area of investigation ranges from 17 inches in the western portion of the area to 22 inches in the northeastern portion. Practically all of the rainfall occurs

1/ Serving 3,125 connections at an average of 897 gallons per day per connection.

2/ Estimated

from November to April. Plate No. 1 shows lines of equal average seasonal rainfall within the area of investigation from 1910 to 1960.

For purposes of this investigation is was assumed that 67 percent of the precipitation falling on the highly permeable materials and 10 percent falling on the remainder of the area would infiltrate to ground water. Infiltration from 20 inches of precipitation per year on 17,700 acres of highly permeable materials and from 18.5 inches on the 41,300 acres of other lands contributes approximately 26,000 acre-feet of recharge to the ground water supply each year.

Stream Channel Seepage. Prior investigations of infiltration in the area estimated that, after completion of upstream controls, percolation of the American River, between the Folsom Bridge and the confluence of the American River with the Sacramento River, would account for approximately 64,000 acre-feet of water per season.[1/]

The Folsom-East Sacramento area embraces less than one-fourth of the area receiving seepage from the American River. While the infiltration rate may vary within different reaches of the river, data generated during the investigation were not sufficiently detailed to determine the actual infiltration rate at each point within the area of investigation. The simplifying assumption was therefore made that the rates of infiltration were invariant and about 16,000 acre-feet of water is percolating annually into the ground water basin underlying the Folsom-East Sacramento Area.

Seepage from the beds of the annual streams in the area is probably small. Runoff is generally rapid, the period of flow seldom

---

1/ Bulletin No. 21, State Water Resources Board, 1955.

lasts more than a few days after a storm. Attempts at determining the amount of seepage on two of the major streams were not successful.

Imported Water. At the turn of the century, the Natomas Dredging Company, needing a reliable supply of water for their operation, constructed a dam on the American River above the City of Folsom. This dam diverted the necessary water to maintain the company's operations and supplied irrigation water to lands under cultivation. The creation of the dam resulted in diversions of at least 26,000 acre-feet of water per year.[1/]

Gold dredging operations required water throughout the year and the percolation of this water from the dredger ponds was a major source of recharge to the ground water basin, amounting to more than 20,000 acre-feet per year. Since the cessation of dredging operations in 1961, diversions to the dredging ponds have been stopped, ending the recharge to the ground water basin from this source.

One of the principal water users in the area, Aerojet-General Corporation, estimates that it has a potential use of ten million gallons of water per day (30.6 acre-feet) and purchases this amount from the Natomas Dredging Company. This water is delivered in a continuous flow by the same conveyance system that formerly supplied the dredging operations. The amount, however, is usually more than is currently needed and the excess is discharged to the old dredger ponds, where it eventually evaporates or infiltrates to the ground water.

1/ The amount of water diverted by the Natomas Dredging Company was of such magnitude that when their dam was removed by the Bureau of Reclamation to allow the construction of Folsom Dam, established water rights were firm enough to cause more than 26,000 acre-feet of water to be relased annually for the use of rights holders.

To reduce this wastage and eliminate maintenance costs on the conveyance system, plans have been made to construct a ten million gallon holding basin. This would allow the amount of water delivered to be reduced to the actual amount needed.

In addition to the ten million gallons furnished by the water company, Aerojet pumps about $1\frac{1}{4}$ million gallons of water (3.8 acre-feet) daily from local wells. Although most of the imported ten million gallons per day are allowed to waste to the dredger tailings, it is more economical for Aerojet to pump the additional $1\frac{1}{4}$ million gallons than to build conveyance systems to outlying test facilities. Of the total water supplied to the Aerojet-General Corporation, about $1\frac{1}{2}$ million gallons of water per day[1/] are returned to the American River via Buffalo Creek as wastes from their sewage treatment plant. An attempt was made to determine the recharge from Buffalo Creek; however, the results of field measurements were inconclusive.

Present recharge to the ground water body from the infiltration of imported water amounts to approximately 8,000 acre-feet per year. If the proposed storage basin is constructed, all recharge to the ground water from the surplus water presently delivered will cease. Recharge to the ground water table will then amount to approximately 2,000 acre-feet per year.

Some of the land bordering the American River have been irrigated in the past by pumping water directly from the river. This

---

1/ Determined from flow records at the Aerojet-General Corporation sewage treatment plant July 1961 to June 1962 inclusive.

practice has almost stopped and recharge from this source is now negligible.

Unconsumed Urban Water. Data collected from nine cities in the Central Valley indicate that approximately 50 percent of the water delivered to urban areas is consumed while approximately 70 percent of the balance flows to the sewers, with the remainder infiltrating to the ground water table.[1/] In short, only 15 percent of the water delivered to urban areas becomes available for infiltration.

Applying this ratio to the amount of water supplied to the Folsom-East Sacramento sewered urban areas by the water companies, as shown in Table No. 7, recharge to the ground water basin from this source amounts to approximately 1,250 acre-feet per year. In 1962, there were approximately 500 homes in the area that were unsewered and discharged their wastes to septic tanks. It is estimated that each of these septic tanks contributes 200 gallons of water per day to infiltration. Recharge from these septic tanks amounted to approximately 100 acre-feet of water during 1962.

The infiltration of waste waters from sewage treatment plants is believed to be negligible and is not considered as a source of recharge in this area. All the plants serving the area of investigation discharge their wastes to watercourses that flow from the area of investigation. The sewage treatment plants and amounts discharged by each during the 1961-62 fiscal year are listed in the following tabulation:

1/ Bulletin No. 21, State Water Resources Board, 1955.

	Effluent Disposal Point	Design Capacity MGD	Discharge	
			MGD	AF/Year
Rancho Cordova	American River	4.0	1.10	1,232
Manlove S.M.D.	Morrison Creek	1.2	0.25	280
Mather A.F.B.	Morrison Creek	1.5	0.97	1,087
Aerojet-General Corp.	Buffalo Creek		0.38	426
TOTAL			2.70	3,025

Unconsumed Irrigation Water. In the Folsom-East Sacramento area, five inches of water may be expected to percolate to the ground water table for every 18 inches of water applied for irrigation.[1/] Assuming an average application of three feet per acre per year,[2/] of which ten inches percolate to ground water, 4,500 acre-feet of water per year is recharged to the area's ground water table from applied irrigation water.

Unconsumed Industrial Water. Many of the waste waters from industrial or manufacturing plants unserviced by sewer systems are discharged to septic tanks or holding ponds. Infiltration from these sources can be significant, depending on the amount discharged and method of disposal. Individual discharges of industrial waste were listed and infiltration rates were assigned to each discharge based on amounts discharged and methods of disposal. It is estimated that the recharge from these unsewered industrial and manufacturing plants amounted to approximately 250 acre-feet of water during 1962.

1/ Bulletin No. 21, State Water Resources Board, 1955.
2/ See discussion in Land Use Survey on Page 9.

Subsurface Outflow

Though subsurface inflow to the ground water basin does not occur through the impermeable formations of the Sierras, subsurface outflow does occur. Consequently the area of investigation is not a closed ground water basin.

Ground water elevations indicate that on a front approximately nine miles in length, ground water is leaving the area with a hydraulic gradient of approximately .0025, a slope of 13.2 feet per mile.

Geologic observations indicate that the sediments through which the water flows average 800 feet in depth and have an estimated permeability of 400 gallons per day per square foot. These dimensions result in a computed subsurface outflow of 42,600 acre-feet per year.

Outflow was computed by means of Darcy's formula ($Q=kiA$) where:

Q = quantity of subsurface outflow

k = permeability

A = cross sectional area

i = hydraulic gradient

This principle was first stated by Darcy as: 1/ "The volume of water which passes through a bed of sand of a given nature is proportional to the pressure and inversely proportional to the thinkness of the bed traversed."

Exported Water

The term "exported water", as used in the report, reflects the waste discharges and irrigation runoff that enter surface watercourses to eventually leave the area of investigation.

1/ Todd, David Keith; Ground Water Hydrology; John Wiley & Sons, Inc., 1959.

Cordova and Manlove sewage treatment plants discharge their wastes to watercourses at points where they flow rapidly from the area. Wastes from the Mather Air Foce Base and Aerojet-General Corporation sewage disposal plants traverse watercourses for some distance before leaving the area. The volume of wastes discharged from these plants amounts to approximately 3,000 acre-feet per year. Irrigation runoff eventually enters the same watercourses and contributes approximately 2,700 acre-feet per year.

The total 5,700 acre-feet of water per year which leaves the area in this manner originate as ground water and represent a direct loss from the ground water basin. This loss is accounted for in estimates of withdrawals and is presented here only for reference.

Hydrologic Summary

A balance of the quantities estimated for these sources of supply and withdrawal was made to reflect the accuracy of the estimates. This balance is summarized in Table No. 8.

TABLE NO. 8

SUMMARY OF ESTIMATED AMOUNTS OF SUPPLY

AND

WITHDRAWALS TO GROUND WATER BODY - 1962

Source	Amount in acre-feet per year
Supply	
Precipitation infiltration 1/	26,000
Stream channel seepage	16,000
Imported water infiltration	8,000
Unconsumed irrigation, urban and industrial water	6,000
TOTAL	56,000
Withdrawal	
Irrigation use	16,100
Urban and industrial use	9,300
Subsurface outflow	42,600
TOTAL	68,000 2/

1/ Based on 50-year average of precipitation.
2/ Includes water removed from storage, see discussion on Page 18.

CHAPTER IV. WATER QUALITY

Ground and surface waters within the Folsom-East Sacramento area are, at present, of excellent quality. However, with the rapid buildup of industry and residences in the area, the opportunities and probabilities for the ground water basin to become degraded will increase. Fortunately, industry and all the agencies of government concerned with the area are aware of the possibilities of contamination and are working together to insure the continuance of a water supply of excellent quality.

Classification of Waters

There are numerous systems of water classification. The system used in this report uses the predominant cation and anion as the primary elements of classification. The units of this system are expressed as a percent of the reacting value of the equivalents per million. Where no ion clearly predominates, a system of hyphenated adjectives is used.[1/]

Waters collected from 96 wells within the study area were classified and found to fall into one of five classifications. These classifications were:

1. Calcium Bicarbonate
2. Sodium-Calcium Bicarbonate

1/ See Fair & Geyer, Water Supply and Waste Water Disposal; and Geological Survey Water-Supply Paper 1473, Study and Interpretation of the Chemical Characteristics of Natural Water.

3. Calcium-Sodium Bicarbonate

4. Calcium-Magnesium Bicarbonate

5. Magnesium-Calcium Bicarbonate

Each class of water is usually found within a certain locality. Plate No. 11, "Mineral Characteristics of Ground Water," shows the locations of the wells producing the various classes of water and the predominant ion groupings. These groupings are usually well balanced. Except for a few wells of a predominately calcium bicarbonate type, within a small locality in the extreme western part of the area of investigation, all wells produce water having two or more of the cations of calcium, magnesium, and sodium. Generally, two are predominant, making up about 80 percent of the reacting value. Table No. 9 (located at the end of this report) shows the concentrations of these cations and anions in both parts per million and equivalents per million. Not all possible combinations exist.

Normally, waters from the same formation may be expected to be of the same classification. In the Folsom-East Sacramento area, however, this is not true. Recharge waters within the area vary in type and in place, ranging from precipitation to waste water. These recharge waters move through the formations, or a single formation, lenticularly or in laminar flow patterns and could be accessible to one well and not another. For this reason, waters drawn from the same formation may be different types.

This phenomenon is illustrated by two wells, 9N/7E-17N1 and 9N/7E-24H1, both penetrating and producing water from the Mehrten Formation only. Well 9N/7E-17N1, located within one-quarter of a mile of the American River, its source of recharge, produces a calcium-magnesium bicarbonate water, the same type of water as is found in the well's source of recharge. Well 9N/7E-24H1 is located away from the influence of recharge of the American River. Infiltration and percolation of precipitation and waste water is its only source of recharge. This well produces a sodium-calcium bicarbonate water.

Most wells producing this class of water (sodium-calcium bicarbonate) are located in the southeastern portion of the area of investigation, with the northernmost well located on Aerojet-General Corporation property in T9N, R7E, Sec. 24. The wells in the southeastern portion of the area of investigation penetrate both the Laguna and Mehrten Formations. The Laguna Formation is now dewatered in this locality and the wells obtain their water from the Mehrten Formation only.

There are wells in the south-central area which produce the same class of water. These wells, however, are probably not deep enough to penetrate the Mehrten Formation. Other wells in the same area, however, produce a calcium-sodium bicarbonate water.

Calcium-sodium bicarbonate water is also obtained from wells located in the southwestern part of the area of investigation. Wells producing this type of water are not drilled deep enough to penetrate the Mehrten Formation, but obtain their waters from the Laguna and Victor

Formations. Many of the wells that supply the individual residences are relatively shallow, penetrating just the Victor Formation, which is seldom at a depth of more than 100 feet. The water from this formation shows no predominant cation. The chemical constituents of this water are so low as to pose a problem to laboratory techniques. Recharge to the Victor Formation is from the American River, which is in direct hydraulic contact with the formation, and from infiltration of precipitation and applied waters.

The calcium-magnesium bicarbonate water is pumped from wells located in the north-central area of investigation. Shallow wells that obtain their supply from the Mehrten Formation, where it is under recharge from the American River, produce this type of water. Deeper wells, located in the Rancho Cordova and Mather Air Force Base areas, that obtain their supply from the three major aquifers, the Mehrten, Laguna, and Victor, also produce a calcium-magnesium bicarbonate water.

Wells producing a magnesium-calcium bicarbonate type of water are located in the northeastern section of the area of investigation. These wells are relatively shallow, drawing from the Laguna Formation only. Recharge to this formation is also from direct contact with the American River, infiltration of imported water from the American River, and the infiltration of precipitation. Though the source of recharge to the various formations is essentially the same, the base exchange properties of each formation are different and account for the different classes of water produced.

The following tabulation summarizes the classification of water found in the various localities within the area of investigation.

General Location Within Area of Investigation	Classification of Water	Remarks
Extreme Western	Calcium Bicarbonate	
Southeastern	Sodium-Calcium Bicarbonate	Water produced from Mehrten Formation
South-Central	Sodium-Calcium Bicarbonate and Calcium-Sodium Bicarbonate	Water produced from Laguna and Victor Formations
Southwestern	Calcium-Sodium Bicarbonate	Water obtained primarily from Laguna and Victor Formations
North-Central	Calcium-Magnesium Bicarbonate	Shallow wells produce from Mehrten Formation. Deeper wells produce from Mehrten, Laguna, and Victor Formations
Northeastern	Magnesium-Calcium Bicarbonate	Shallow wells producing from Laguna Formation

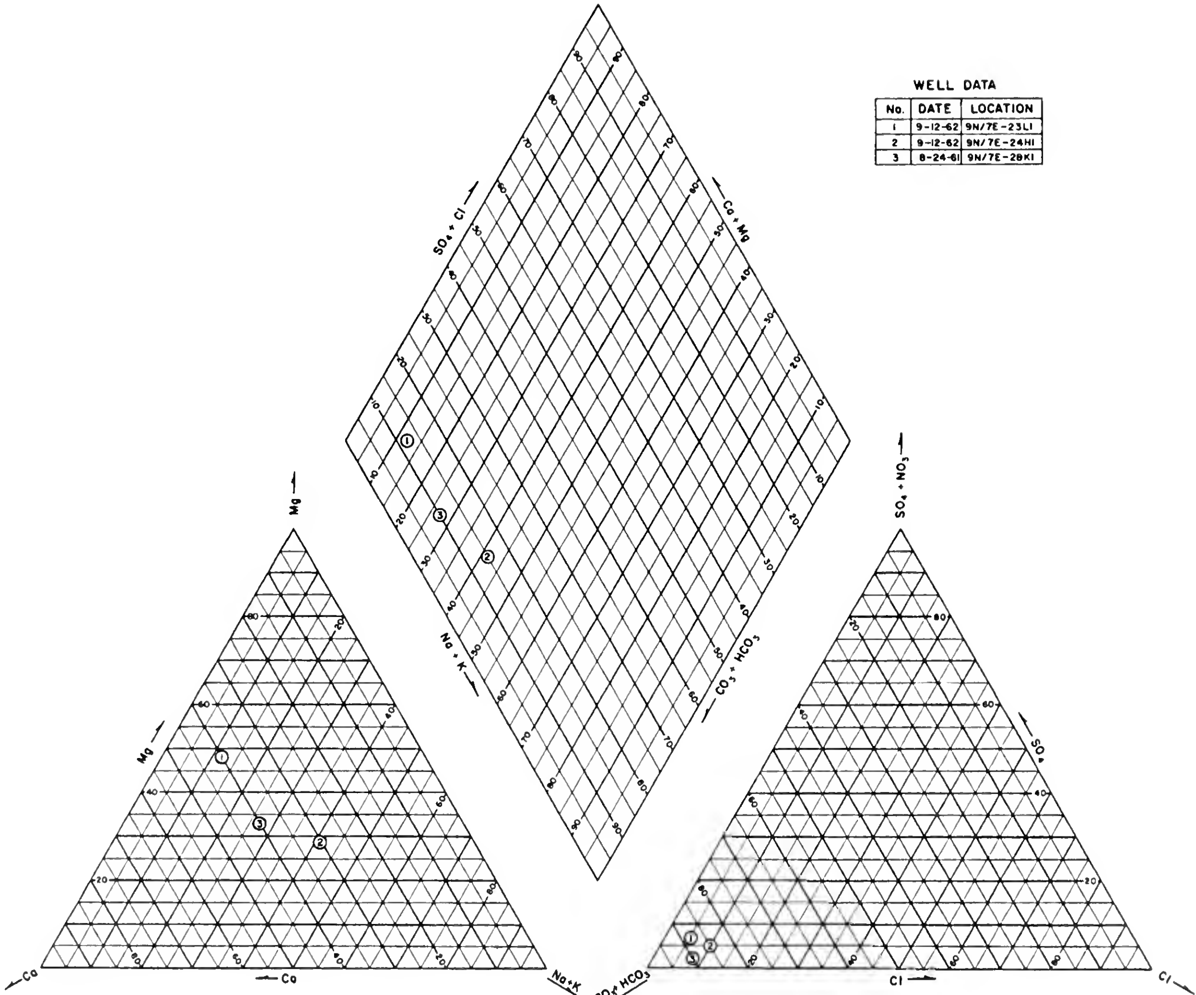
There are a number of wells throughout the area of investigation that obtain their water from more than one aquifer. Knowing the characteristics of the water produced from individual aquifers, it is sometimes possible to determine which aquifers are contributing to each well and to arrive at a determination of the amount each aquifer contributes. This is accomplished by using a method outlined by Piper [1/] involving the use of the trilinear graph.

[1/] Piper, A. M., 1944; Transactions of American Geophysical Union, Volume 25, pages 914 - 923.

Piper, and other writers who have proposed trilinear graphs, have pointed out that where an analysis shows a mixture of two original waters, this mixture will plot on a straight line between the original two. For mixtures of more than two waters, the analyses of the mixture would plot within a figure bounded by the components.

An example of a mixture of two waters is shown in the analyses of water produced from well 9N/7E-28K1 owned by the Aerojet-General Corporation. The driller's log of this well shows that the well is supplied from both the Laguna and Mehrten formations. Figure No. 2 indicates that water of different qualities is available from the separate aquifers. The characteristics of water obtained from the Laguna Formation and Mehrten Formation can be observed in the plot of the analyses of water obtained from wells 9N/7E-24H1 and 9N/7E-23L1. Well 24H1 produces water from the Mehrten Formation and well 23L1 from the Laguna Formation. The analysis from 28K1 plots midway between the two analyses from 24H1 and 23L1. It is thereby indicated that each aquifer is contributing approximately the same amount of water to the well. Simple mixtures such as this occur throughout the area of investigation where wells are drilled deep enough to penetrate two formations. These pairs are usually the Laguna and Mehrten Formations, or the Victor and Laguna Formations.

More complex mixtures are obtained only from those wells that are deep enough to penetrate all three of the water producing formations. Such wells are located in a belt running in a north-south line through the



WELL DATA

No.	DATE	LOCATION
1	9-12-62	9N/7E-23L1
2	9-12-62	9N/7E-24H1
3	8-24-61	9N/7E-28K1

Figure 2, COMPARISON OF ANALYSES OF THREE SELECTED WELLS central part of the area of investigation. These wells are the largest producers in the area, developed mainly for municipal and industrial use by water supply agencies.

It has been determined that wells producing a mixture of water from all three aquifers are producing a calcium-magnesium bicarbonate type of water, the same type derived from the Mehrten Formation where it is recharged by the American River.

Analyses of Water

The common chemical constituents generally reported in water analyses are the cations: calcium, magnesium, sodium, and potassium, and the anions: bicarbonate, carbonate, sulfate, and chloride. Colloidal constituents generally occur as silica, and iron and aluminum oxides. Lesser constituents, which are limiting factors in the usability of water for agricultural or domestic uses are boron, fluoride, and nitrate. A more thorough discussion of limiting constituents and water quality criteria are included in Appendix C of this report.

Mineral Analyses

The ground water throughout the area of investigation is of excellent quality. Table No. 10 presents the range of mineral constituents of 203 available mineral analyses of ground water throughout the area. These analyses are included in Table No. 9, located at the end of this report.

TABLE NO. 10

RANGE OF MINERAL CONSTITUENTS OF GROUND WATER

Mineral Constituents	Parts Per Million[1/]		
	High	Low	Average
Calcium	63	6.2	21
Magnesium	36	0.5	11
Sodium	27	4.7	13
Potassium	7.3	0.0	1.9
Bicarbonate	322	38	122
Sulfate	35	0.0	6.9
Chloride	87	1.0	9.6
Nitrate	48	0.0	4.4
Fluoride	2.8	0.0	0.2
Boron	0.22	0.00	0.02
Silica	84	5.6	53
Hardness (total)	288	23	95
Total Dissolved Solids	405	73	178
EC x 10^6 (Mhos)	658	94	247
Percent Sodium	47%	5.0%	25%

1/ Except EC x 10^6 and Percent Sodium.

It should be noted that only one well (9N/7E-15M3) had a nitrate concentration which exceeded U. S. Public Health Service standards for drinking water. The limiting nitrate concentration for such water is

45 ppm. A concentration of 48 ppm was reported on the analyses collected on August 13, 1958, though samples taken previous to and after this sample had no concentration higher than 12 ppm.

Well No. 8N/6E-4K1 showed an increase from 26 ppm on December 18, 1961, to 39 ppm on January 10, 1963. Well No. 8N/6E-5K2 showed the concentration increasing from 16 ppm on June 12, 1955, to 20 ppm on September 19, 1958, and to 29 ppm on January 16, 1963. These two wells are located in an area devoted to intensive agriculture. These increases could be attributed to the nitrates applied as fertilizers, especially since both wells are rather shallow.

Some of the deeper wells that penetrate the Laguna and Mehrten Formations have been reported to have a hydrogen sulfide odor and iron problem. Well No. 8N/6E-14K1, one of the wells supplying the housing area of Mather Air Force Base, has been reported as giving off such odors. Analysis of the water from this well showed concentrations of 4.2 ppm of total iron on January 6, 1958, and 0.19 ppm on June 21, 1962. The Aerojet-General Corporation has also reported a similar problem in their Well No. 9N/7E-28K1.

Organic Analyses

Organic concentrations in ground water, in amounts measured in parts per billion, can cause taste and odor problems. Progress in understanding and evaluating organic contaminants is hampered by the difficulty of detecting these low concentrations and by identification of the complex varieties. Methods for concentrating, isolating and identifying these organic materials have been under study by the U. S. Public Health Service at the Robert A. Taft Sanitary Engineering Center where, as a result of this study, the "Carbon Adsorption Method for Organics in Water," was perfected.

Tests have shown that activated carbon has unique adsorptive characteristics and can be used to recover organics from water and wastes. The organics can then be elutriated from the carbon by solvent extraction. Basically, the collection procedure is to pass a large amount of sample water at a slow rate through a column of activated carbon, with the objective of isolating all of the organic materials present by adsorption to the carbon. The carbon is then removed and dried and the adsorbed organics extracted with chloroform and ethanol. The chloroform extract may then be separated into fractions by means of differential solubility and chromatography.

The organics that are extractable by chloroform are usually man-made; whereas, the ethanol, or alcohol extractables usually occur naturally. Chloroform extractables are separated into ether insolubles, water insolubles, amines, strong acids, weak acids, and neutrals. Since the neutral fraction usually contains the most important taste and odor producing compounds, this fraction is further separated into aliphatic, aromatic, and oxygenated fractions by use of the column chromatograph.

The U. S. Public Health Service drinking water standards have set limits on the organic concentrations and recommend that chloroform extractables do not exceed 0.2 ppm.

Ten representative wells were selected during this investigation to establish present organic concentrations and provide data for future reference. Geologic factors, direction and movement of ground water, and expected life and availability of the well were considered in determining which wells to select as "representative."

The results of the analyses for organic concentrations of the waters from these wells are shown in Table No. 11. Infrared spectrographs of these samples are on file with the California Department of Public Health, and Department of Water Resources.

The data show that the greatest concentrations of the chloroform extractables appear in the phenol-indicating weak acids and the aliphatic (petroleum type hydrocarbons) fraction of the neutrals. This would indicate that the organic constituent could be oil; however, present knowledge of this analytical procedure has not developed to the point where this supposition can be confirmed.

Sources of Possible Impairment

Until recently the area of investigation was largely devoted to agriculture and the few industries located within the area were small. What few ground water quality problems might have existed were local and minor.

In the early 1950's the Aerojet-General Corporation purchased a plot of barren land littered with extensive dredger tailings. The land has now been developed as a site for an industrial complex devoted to the development and production of rocket engines. This development brought with it many smaller, related industries and increased the demand for housing in the area. The resulting demand on the water supply has multiplied the wastes sufficiently to indicate the need for larger facilities and stricter control of disposal practices to prevent possible impairment of ground water quality.

Domestic Sewage

To meet the disposal needs of the domestic wastes of this growing area, four sewage disposal plants have been built thus far. All discharge their effluent to a watercourse that eventually returns either to the American or to the Sacramento River. Plate No. 10 outlines the areas served by these plants. Waste discharges outside these service areas, and some of the discharges within the service areas, are disposed of by direct discharge to land surface, cesspools, or septic tanks with leach lines.

Industrial Sewage

Industrial wastes are the largest source of possible impairment in the area. Whenever harmful industrial wastes are discharged into stream channels, the ground, or unlined sumps, they constitute a threat to the ground water in that area.

Sources of industrial wastes include the aerospace industry, liquid rocket fuel industry, solid rocket fuel industry, an oil refinery, an olive packing plant, a winery, and a tallow works. There is also a refuse disposal site in the area, the Sacramento County Dump, which could create noxious wastes by precipitation filtering down through accumulated layers of trash, tin cans, grass clippings, and other refuse.

Aerospace Industries. Two corporations in the area are directly involved in the aerospace industry, Aerojet-General Corporation and the Douglas Aircraft Company. The Aerojet-General Corporation, the larger of the two in area and number of employees, is involved in developing and assembling rocket engines and fuels.

Sources of wastes from the Aerojet-General Corporation facilities consist of wastes from 18,000 employees, and from the laboratories, processes, machine and assembly shops, clean-up water from solid propellant production lines, and deluge water used for cooling rocket test-firing pads.

Potential pollutants are removed by trapping and physical separation, or by treatment with neutralizing agents at the point of origin. The residual water is then collected in leaching basins, or ponds, where it is subjected to aeration before infiltration. Domestic wastes are conveyed through conventional water-borne sewage systems to activated-sludge disposal plants or to septic tanks in the outlying areas.

Certain compounds that may degrade ground waters or cannot be safely disposed of, such as ammonium and potassium perchlorate and contaminated trichlorethylene, are collected and sealed in approved containers and dumped at sea in an approved dumping area. During the course of this investigation a pilot operation was initiated to dispose of certain of these wastes by detonation and burning.

The Douglas Aircraft Company uses their facilities mainly for the testing of rocket engines. The only liquid waste from this process is the large amount of deluge water used for cooling purposes which can pick up soluble products of combustion. This water is allowed to infiltrate to the ground water after ponding to allow oxidation of any contaminant to occur. The small amount of wastes generated by manufacturing processes is discharged to septic tanks. Domestic wastes, after passing through a catch basin to allow skimming of any solvent used, are diverted into the same septic tanks.

Liquid Rocket Fuel Industry - Liquid oxygen and liquid nitrogen are major constituents of the liquid fuel used as a rocket propellant. Both these liquids are manufactured by the Air Products and Chemicals Company on Folsom Boulevard near the Nimbus overpass. Water used to cool the compressors and refrigeration equipment used in the manufacturing process is treated with algicides and corrosion inhibitors. Oil from the machinery enters the water as it flows through a closed circuit which has a provision for the diversion of overflow water. The overflow water passes into a catch basin where the oil and solvents are trapped. The water then flows into a septic tank which also receives domestic wastes. The possibility of pollution from this source would be insignificant if it were not for the algicides and corrosion inhibitors in the wastes.

Solid Rocket Fuel Industry - The manufacture of solid rocket fuels usually creates highly toxic wastes which must be disposed of without injury to ground or surface waters. Several methods have been used for disposal of these wastes. Until recently the most effective (and costly) method was to store the wastes in large drums which were dumped into the ocean.

The natural gas and oil industries, however, had been pumping their toxic wastes into underlying saline and other unusable aquifers for many years. In 1961, the Aerojet-General Corporation requested permission from the Central Valley Regional Water Pollution Control Board to determine the feasibility of disposing of highly toxic wastes in a similar manner.

A pilot test hole was drilled to a depth of approximately 1,600 feet, where formation samples and water samples were obtained. Analysis of the samples confirmed the presence of confined formations that contained unusable connate water. Permission was then granted by the Regional Water Pollution Control Board for the design and construction of an injection well that would allow these wastes to be disposed of in these formations in such a manner as to obviate any possibility of mixing the wastes with usuable waters. The injection well has been in operation since 1963.

Reclaimed Oil Processing. The Brighton Oil Company, located at the intersection of White Rock Road and Kilgore Road, reprocesses used or waste oils consisting primarily of crank case drainage collected from service stations and industrial plants.

Cooling water makes up nearly the entire volume of waste water from this operation and is disposed of to a pond. A trap is used to skim off oils and solvents that might have entered the cooling waters.

Food Packing Plants. The only food packing plant within the area of investigation is owned by the Libby, McNeil, & Libby Company and is used exclusively for the curing of olives.

Waste products from this plant include brine, lye, and dilute sulfurous acid. This waste amounts to an annual discharge of approximately 175 tons of sodium chloride, 30 tons of sodium hydroxide and 18 tons of sulfur dioxide and lime. All wastes from this plant are discharged to dredger tailings bordering the American River.

For many years engineers were perplexed about the disposal of highly saline wastes from this source. It was anticipated that local ground water quality would be affected, yet chloride concentrations in wells down gradient from the plant showed no apparent increase. Upon review of data obtained in our surface water monitoring program it was noticed that an apparent betterment in quality existed in the American River between the Nimbus Dam sampling station and the downstream Fair Oaks Bridge station. Upon investigation it was found that the upstream station was adjacent to the left bank and a short distance downstream from the Libby, McNeil, and Libby Company's plant. Review of the data indicated that lateral seepage of the saline wastes may have increased mineral concentrations along the left bank and caused the high reading at this point.

A field check made in May of 1963 noted that wastes from the plant were ponding throughout the dredger tailings as far as one-half mile distant from the point of discharge. One pond, located within 500 feet of the American River, contained water with a conductivity of 2,355 micromhos and a chloride concentration of 500 ppm.

Wineries. The Mills Winery, located on Folsom Boulevard between Bradshaw and Routier Road, is the only winery located within the area of investigation. Since 1959, the winery has restricted its operation to the aging and bottling of wines, importing the fermented juices from another winery where the crushing and initial fermentation has taken place. Wastes from this plant, consisting of domestic sewage and washdown water from the aging vats and bottling operations, are discharged to a septic tank with leach lines.

Tallow Works. The Sacramento Reduction and Tallow Works, located on Kiefer Boulevard (formerly Middle Jackson Road) between Eagle Nest Road and Connor Road, produces over 180 tons of tallow per month. Wastes from this plant consist of boiler blowdown water and rendering vat wash water, which are disposed of to seepage ponds. Domestic wastes are discharged to septic tanks.

Refuse Disposal Sites

The County of Sacramento maintains a refuse disposal site at the intersection of White Rock Road and Grant Line Road on land that had been previously worked by dredgers. It is a Class II dump,[1/] which accepts all types of trash, and a special area has been set aside for the disposal of cleanings from cesspools and septic tanks. The liquid and solid refuse dumped contains mineral and organic substances in quantities capable of seriously damaging ground water. Aerobic and anaerobic

---

1/ Standards for Dumps, California Department of Water Resources decomposition of the organic matter produces large volumes of carbon dioxide and methane gas. Carbon dioxide dissolves calcium, manganese, iron, and other substances which, in high concentrations, are undesirable in water.

Abandoned Wells

Improperly constructed, defective, or abandoned wells could be a factor in the degradation, pollution, or contamination of the usable ground waters if they permitted surface waters, or the leachate from septic tanks or cesspools, to percolate into the ground water reservoir.

Wells were originally drilled in the area where they would be convenient for both irrigation and domestic purposes. These older wells had to supply large amounts of water. They were therefore drilled deep enough to penetrate a number of water-bearing strata. The casings were usually large enough to allow installation of a large irrigation pump as well as a smaller domestic pump. Even though agriculture might since have ceased and the irrigation pumps left to rust, the domestic pumps usually were kept in operation. A number of wells which otherwise would have been abandoned have been kept in operation for domestic uses.

The usual reason given for abandoning a well is that the water table has dropped and the well no longer produces. The casing may have deteriorated to a point where it is no longer safe to place pumping equipment in the well, or the existing casing may be too small to allow installation of the size of pump desired. In a few cases, wells that were drilled for a particular industry have been abandoned after the industry ceased to exist.

In the eastern area of investigation, some hand-dug, brick-lined wells have been abandoned because they penetrate formations which no longer contain water. One of these, located in T8N, R7E, Sec. 22K, is five feet in diameter and 131 feet deep.

For the purposes of this report, those wells which have had their pumping equipment removed, or are obviously unusable, have been classified as abandoned and are listed in Table No. 5.

Naturally Occurring Impaired Water

Ground water of good quality can become degraded or impaired by natural sources as well as from industrial, agricultural, and domestic wastes.

Though the readily accessible ground waters within the area of investigation are of excellent mineral quality, deeper formations contain highly mineralized waters. These poorer quality waters are not necessarily adjacent to the better quality water, but may be separated by one or more other formations.

As an example, the Mehrten Formation, which contains water of excellent quality is underlain by the impermeable formation called the Valley Springs, or Ione Formation. This formation is composed of silts and clays about 500 feet thick. Below the Ione Formation lie formations of Cretaceous Age, which contain poor quality (highly mineralized) waters. Nature has effectively separated these two aquifers, but poorly constructed deep wells could allow the waters to comingle, degrading the good water in the Mehrten Formation.

As discussed under the heading "Solid Rocket Fuel Industry," the deep formations are being used to receive highly toxic wastes injected by the Aerojet-General Corporation. Table No. 12 presents the analysis of one such mineralized water taken from Well No. 9N/7E-32D1 which was developed as a test hole to determine the feasibility of waste injection into deep underlying formations.

TABLE NO. 12

QUALITY OF WATER AT 1,000 FEET [1/]

Well No. 9N/7E-32D1

Cations	ppm	Other Characteristics	
Calcium	74	Caustic alkalinity	208 ppm
Magnesium	0	Total alkalinity	236 ppm
Sodium	268	Hardness as $CaCO_3$	200 ppm
Potassium	3	Total dissolved solids	952 ppm
Anions		Percent sodium	80 %
Chloride	410	pH	11.1
Sulfate	2.6		
Nitrate	0.3		
Boron	6.0 + (Lab scale of 4.0 exceeded)		

[1/] This water is beyond the limits recommended by the U. S. Public Health Service drinking water standards for total dissolved solids and chlorides, and falls in Class III irrigation water because of the boron and chloride concentration and the percent sodium.

Monitoring Program

The Department of Water Resources is authorized by Section 229 of the California Water Code to investigate the quality of all waters within the State in relation to all sources of pollution and report to the Legislature and to the appropriate Regional Water Pollution Control Board any recommendations or steps which might be taken to improve or protect the quality of these waters.

To carry out the objectives of the section of the Code, a program was established in the summer of 1951 to provide information on the prevailing mineral quality of waters throughout the State. An intensive, continuing check of water quality to detect any significant changes and ascertain the area affected by such changes was also incorporated into this investigative program.

Surface Water

There is only one surface water quality monitoring station within the area of investigation, located on the American River below Nimbus Dam. Samples are collected monthly and analyzed for alkalinity, boron, chloride, conductance, dissolved oxygen, hardness, pH, sodium, and turbidity. Complete mineral, heavy metal, and radiological analyses are made on samples collected during the months of May and September. Samples are also collected quarterly from Morrison Creek below Mather Air Force Base and analyzed for radiological activity. Table No. 13 includes the latest available analyses for surface water within the area of investigation.

Ground Water

The ground water quality monitoring program has concentrated on those wells in the vicinity of the Aerojet-General Corporation plant. When the program began in 1953, 14 wells were monitored. These were sampled annually and analyzed for the standard mineral constituents and for ammonium and perchlorate concentrations. Only five wells are now monitored and analyzed for the same constituents. It is felt that this number of wells provides a network intensive enough to detect any significant, sudden change in the quality of ground waters within the area of investigation. The following tabulation lists the wells now being monitored.

Well No.	Owner	Years of Sampling Record	Analyses
9N/7E-21D1	Air Products and Chemicals, Incorporated	1958-63	Standard Mineral - Ammonium-Perchlorates
9N/7E-26H1	Capitol Dredging	1953-63	Standard Mineral - Ammonium-Perchlorates
9N/7E-28K1	Aerojet-General Corporation	1956-63	Standard Mineral - Ammonium-Perchlorates
9N/7E-32B1	J. A. Rodgers	1955-63	Standard Mineral - Ammonium-Perchlorates
9N/7E-33E1	Ben Petrucci	1955-63	Standard Mineral - Ammonium-Perchlorates

Analyses of water from these and other wells monitored appear in Table No. 14.

Waste Water

The present waste water monitoring program includes annual sampling of those plants discharging more than 0.5 MGD. This involves only three plants within the area of investigation which are listed in the following tabulation.

Plant	Treatment	Design Capacity MGD	Effluent Disposal Point
Cordova S.M.D.	Secondary	4.0	American River
Manlove S.M.D.	Secondary	1.25	Morrison Creek
Mather Air Force Base	Secondary	1.5	Morrison Creek

Samples from the three waste discharge plants are now being analysed periodically for mineral constituents. 1/ Those collected from Mather Air Force Base are occasionally analyzed for mineral constituents, for heavy metals, and gross radioactivity. Analyses of samples collected from these plants are included in Table No. 14.

In addition to the monitoring program conducted by the Department of Water Resources, the Central Valley Regional Water Pollution Control Board (No. 5) has adopted waste discharge requirements for the Aerojet-General Corporation, Libby, McMeil and Libby Company, and Mather

1/ Mineral constituents analyzed for are Ca, Mg, Na, K, SO_4, Cl, NO_3, B, as well as NH_4, PO_4, and ABS.

Air Force Base. One of the requirements is that a ground water sampling program be maintained to determine any degradation that might occur from waste discharges.

The samples are collected periodically and analyzed for constituents associated with the type of discharge. The analyses are submitted to the Central Valley Regional Water Pollution Control Board (No. 5).

CHAPTER V. RECOMMENDATIONS

The department finds that water pumped within the area of investigation is satisfactory for all beneficial uses, and that its quality is unaffected by present waste disposal practices. Ground water monitoring programs, both those conducted by the department and those conducted for the Water Pollution Control Board by waste dischargers within the area, will continue. The department recommends that future water quality measurements from the area be compared with those cited in this report to enable detection of any degradation in ground water quality which may result from increased waste discharges.

TABLE 5

WELL DATA

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available: Log	Data available: Water levels	Data available: Analyses
8N/6E- 2N1	South of U. S. 50 on Mather Field Dr. to Mather Air Force Base, Base Well #3.	Mather Air Force Base	1941	Mun.	90	12	531		X		X
8N/6E- 2P1	South of Folsom Blvd. on Mather Field Dr. to Mather Air Force Base, Base Well #4.	Mather Air Force Base		Mun.	95	12					X
8N/6E- 3B1	South side of Winchester Way in Cordova Town, south of of Folsom Blvd.	Citizens Suburban Co.	1956	Mun.	85	20" 72' 14" 166' 12" 377'	377	230-242 278-306 310-326 352-372	X	X	X
8N/6E- 3G1	0.95 mile south of Folsom Blvd. on Mather Field Dr. northeast of apartment building complex - east of swim-pool in shed.	Jonas Selinger	1957	Dom.		12	445	0-138	X	X	X
8N/6E- 3H1	0.9 mile south of Folsom Blvd. on Mather Field Dr., 0.15 mile east on Rockingham Dr., fence enclosure 50 feet south of road.	Citizens Suburban Co.		Mun.	91	14	500		X	X	X
8N/6E- 3K1	0.3 mile north of Mather AFB main gate on Mather Field Dr. - well in carwash building east of road.	Jonas Selinger	1959	Ind.	90	10	264		X		
8N/6E- 3K3	0.95 mile south of Folsom Blvd. on Mather Field Dr. - northeast of apartment building complex - east of swim-pool in shed.	Jonas Selinger	1959	Dom.	89	12	320		X		
8N/6E- 3M2	0.3 mile north of Mayhew Church on Routiers Rd., 0.3 mile east of house, pumphouse 30 feet northwest of house.	Dain Domich		Irr.	86	10				X	
8N/6E- 3N1	0.75 mile south of Folsom Blvd. on Routiers Rd. & 600 feet east of Routiers Road.	Citizens Suburban Co.		Dom.	80					X	
8N/6E- 3R1	500 feet north of Mather Air Force Base main gate on Mather Field Dr., well behind Hancock Service Station.	Hancock Oil Co.	1954	Ind.	90	10	98		X		
8N/6E- 4A1	220 feet south of Folsom Blvd. and 100 feet west of Routiers Rd. in pumphouse 6 feet east of house.	Orangevale Glass Co.	1958	Dom.	74	10" 180' 14" 56'	280				X
8N/6E- 4A2	500 feet south of Folsom Blvd. and 300 feet west of Routiers Rd. in clothes line area next to swim-pool.	R. E. Froom	1958	Dom.	71	10" 180'	280		X	X	X
8N/6E- 4A3	250 feet south of Folsom Blvd. and 100 feet east of Routiers Rd. behind old winery (Van & Storage now).	L. F. Noonan	1947	Dom.	73	12	125			X	
8N/6E- 4B1	0.9 mile east of Bradshaw Rd. and 200 feet west of Mather Auto Movie Entrance on Folsom Blvd., 35 feet north of U. S. 50	Bartilini & Hacket		Dom.	71		67.5			X	
8N/6E- 4G1	0.3 mile west of Routiers Rd. on Folsom Blvd., 150 feet south of Folsom Blvd. (near Routiers Station - Rancho Realty).	Manuel Souza		Dom.	70					X	
8N/6E- 4R2	500 feet west of Routiers on Folsom Blvd., 0.2 mile south on drive, 100 feet north of house and north of water tower.	John Horn	1948	Dom.	75	12	141		X		

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available		
									Log	Water levels	Analyses
8N/6E- 4K1	0.4 mile west of Routiers Rd. and 0.3 mile south of Folsom Blvd., well 20 feet south of house.	C. A. Mehl		Dom.	72	10	140			X	X
8N/6E- 4L6	0.55 mile east of Bradshaw Rd. on Folsom Blvd., 300 feet south of road and 25 feet southwest of building.	Paul Kershaw	1947	Ind.	67	12	162		X		
8N/6E- 4M1	0.25 mile east of Bradshaw Rd. and 200 feet south of Folsom Blvd., in garage.	Helen B. Ochsner		Aband.	65	12	100			X	
8N/6E- 4M2	200 feet east of intersection of Bradshaw Rd. and Folsom Blvd., northwest of Great Orange Stand north side of hwy.	Jim Gore	1956	Dom.	63	10			X		
8N/6E- 4M3	0.25 mile east of Bradshaw Rd and 300 feet south of Folsom Blvd., 20 feet south of garage.	Helen B. Ochsner	1956	Dom.	65	12	145		X		
8N/6E- 5H1	0.4 mile north of Folsom Blvd. on Bradshaw Rd. and 75 feet north of road where road turns west.	A. Mucke		Dom.	66	12	110			X	
8N/6E- 5J3	200 feet north of intersection of Bradshaw Rd. and Folsom Blvd., 200 feet west of Bradshaw Rd. on north side of shed.	Koai Tamano	1951	Dom.	62	12	143		X		
8N/6E- 5K1	0.5 mile west of Bradshaw Rd. and 0.4 mile north of Folsom Blvd.	Catholic Church		Aband.	62		70			X	
8N/6E- 5K2	0.5 mile west of Bradshaw Rd. on Folsom Blvd., 0.15 mile north and 0.15 east and 0.1 mile north on drive, well northwest of house.	Joe Saiki	1954	Irr. & Dom.	60		180				X
8N/6E- 5K4	0.5 mile west of Bradshaw Rd. on Folsom Blvd., 0.15 mile north, 0.15 mile east and 0.3 mile north on drive to pump-house in field.			Irr.	65		78			X	
8N/6E- 5L1	0.6 mile west of Bradshaw Rd. on Folsom Blvd., 0.25 mile north on drive to corrugated metal pumphouse.			Irr.	58					X	
8N/6E- 5M1	0.3 mile north of intersection of Mayhew Rd. and Folsom Blvd. Well northeast of house.	Kumamoto	1950	Dom. & Irr.	52	12				X	
8N/6E- 5Q8	0.45 mile west of Bradshaw Rd. on Folsom Blvd., 175 feet north on drive, well north of shed, west of drive.	Lee Wright Casa Linda Motel		Dom.	58		80			X	
8N/6E- 5Q10	0.45 mile west of Bradshaw Rd. on Folsom Blvd., 300 feet north on drive, well west of drive.	Ed Hillman		Dom.	58		75			X	
8N/6E- 5R1	500 feet south of Folsom Blvd. on Bradshaw Rd., 250 feet east of road and 6 feet east of shed.	Jim Gore	1956	Dom.	61	10	146		X		
8N/6E- 5R6	0.2 mile west of Bradshaw Rd. on Folsom Blvd., 125 feet north on drive, well 50 feet north of house.	Mrs. J. F. Didion	1954	Dom.	60	10	127		X	X	
8N/6E- 5R7	30 feet northwest of house at northwest corner of Bradshaw Rd. and Folsom Blvd.	Mrs. J. F. Didion		Dom.	59		110			X	
8N/6E- 5R8	250 feet south of Folsom Blvd. on Bradshaw Rd., 100 feet east of Bradshaw Rd. in yard.	Southern Pacific Pipeline		Dom.	63					X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available: Log	Data available: Water levels	Data available: Analyses
8N/6E- 5R9	200 feet north of Folsom Blvd. on Bradshaw Rd. to drive, well in orchard south of house.	Koai Tamano		Irr.	60					X	
8N/6E- 7G1	0.5 mile west of Mayhew Rd. on Folsom Blvd., 250 feet north on drive, 125 feet east of house.	Ruth Coleman		Dom.	55					X	
8N/6E- 7H1	0.25 mile west of Mayhew Rd. on Folsom Blvd., 35 feet south of railroad tracks in metal pumphouse.	Beltroie Brothers		Irr.	55					X	
8N/6E- 7K1	0.5 mile east of Manlove Rd. on Folsom Blvd. to drive, well 1000 feet east of drive by power line.	Lewis Coleman	1958	Irr.	52	12	174		X	X	
8N/6E- 7M1	0.35 mile east of Manlove Rd. on Folsom Blvd. to drive, 475 feet north of Folsom Blvd.	J. D. Dauenhauer		Irr.	49					X	
8N/6E- 7N2	0.1 mile east of Manlove Rd. on Folsom Blvd. to drive, well 15 feet northeast of building.	M. Hall		Irr.	46		130			X	
8N/6E- 7N3	1000 feet east of house, house 300 feet east of Manlove Rd. and south of Folsom Blvd.			Dom. & Irr.	48					X	
8N/6E- 7P1	0.6 mile east of Manlove Rd. on Folsom Blvd. to drive, well south of old tank house.	Ruth Coleman		Irr.	52				X		
8N/6E- 8A1	0.3 mile south of Folsom Blvd. on Bradshaw Rd., 250 feet west on drive, well in center of circular drive.	Miller		Irr. & Dom.	64		104			X	
8N/6E- 8B1	0.56 mile west of Bradshaw Rd. on Folsom Blvd., 265 feet south of Folsom Blvd. at southwest corner of shed.	Bob Ishimato		Dom.	60	10				X	
8N/6E- 8C1	0.15 mile east of Manlove Rd. on Folsom Blvd. to drive, north on drive, well north of tin shed.	Robert Scholz		Irr.	59					X	
8N/6E- 8D2	200 feet north of Folsom Blvd. on Mayhew Rd., 70 feet east on drive, well 30 feet south of drive.	T. J. Niederost		Dom.	57	10				X	
8N/6E- 8E2	0.1 mile south of Folsom Blvd. on Mayhew Rd. to drive, west on drive to well west of water tank.	Beltroie Brothers	1950	Dom. & Irr.	57					X	
8N/6E- 8F1	0.15 mile south of Folsom Blvd. on Mayhew Rd., 360 feet east of road in old shed.	Beltroie Brothers	1950	Irr.	58	12	122		X	X	
8N/6E- 8G4	0.5 mile west of Bradshaw Rd. on Folsom Blvd., 0.3 mile south on private road, 600 feet east in field.	Sam Ishimato		Irr.	60		120			X	
8N/6E- 8H4	0.5 mile south of Folsom Blvd. on Bradshaw Rd., well in garage west of road.	J. F. Kennedy	1946	Irr. & Dom.	55	8	84		X		
8N/6E- 8H9	0.6 mile south of Folsom Blvd. on Bradshaw Rd., west of buildings by pressure tank.	Chet Scudder	1956	Dom. & Irr.	57	10	117		X		X
8N/6E- 8J7	South of Kelly School on Bradshaw Rd. in first garage west of road.	D. Cordano		Dom.	62		175			X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)
b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont)

WELL DATA

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available		
									Log	Water levels	Analyses
8N/6E- 8J8	0.15 mile north of Old Placerville Rd. on Bradshaw Rd., in garage 150 feet west of road.	Stanley Beyer	1950	Dom.	64		75			X	
8N/6E- 8K1	0.75 mile south of Folsom Blvd. on Bradshaw Rd. to drive, 0.3 mile west on drive to well in shed.	Michael Cordano		Aband.	60					X	
8N/6E- 8M1	0.25 mile south of Folsom Blvd. on Mayhew Rd., 350 feet west on drive, 160 feet south of drive in orchard.	Beltroie Brothers		Irr.	56					X	
8N/6E- 8P2	0.1 mile north of Goethe on Mayhew Rd., 150 feet west of road in shed.	William Young		Irr.	56	12	84			X	
8N/6E- 8R1	0.1 mile west of Bradshaw Rd. on Goethe Rd., 20 feet north of road at edge of orchard.	Bader Realty		Irr.	70					X	
8N/6E- 9B1	120 feet northwest on the northwest corner of Saturn Dr. and Vanguard Dr.	Lynn Hannum	1954	Irr.	73	12	125			X	
8N/6E- 9B2	South of General A. M. Winn School on Explorer Dr. in Lincoln Village, fence enclosure	Citizens Suburban Co.	1959	Mun.	70	14	434		X	X	X
8N/6E- 9N1	0.2 mile east of Bradshaw Rd. on Old Placerville Rd., 300 feet north of road and 75 feet east of garage.	H. G. Brugger	1958	Dom.	70	10	145		X		
8N/6E- 9P5	0.35 mile east of Bradshaw Rd. on Old Placerville Rd., well east of drive and 75 feet north of road.	W. P. Noble	1961	Dom.	74	12	150			X	X
8N/6E- 9Q2	0.55 mile east of Bradshaw Rd. on Old Placerville Rd., 100 feet north of road, east of house behind tank tower.	J. E. Robinson		Dom.	76					X	
8N/6E- 9Q3	0.65 mile east of Bradshaw Rd. on Old Placerville Rd., 150 feet south of road behind water tower - pumphouse.	Tom Yokoi	1939	Dom. & Irr.	75	12	175			X	
8N/6E- 9R2	0.25 mile south of intersection of Routiers Rd. and Old Placerville Rd., 30 feet south of house.	Dave Northrop	1946	Dom.	77	12	130			X	
8N/6E-10D1	0.5 mile north of Old Placerville Rd. on Routiers Rd., pump-house behind Mayhew Baptist Church, 600 feet east of road.	R. Satow	1929	Dom. & Irr.	80	12	120			X	
8N/6E-11C1	South of Folsom Blvd. on Mather Drive to Mather Air Force Base, Building #3975, Base Well #1	Mather Air Force Base	1949	Mun.	90	12	530		X	X	X
8N/6E-11C2	South of Folsom Blvd. on Mather Drive to Mather Air Force Base, Building #3975, Base Well #2	Mather Air Force Base	1941	Mun.	92	12	584		X	X	X
8N/6E-13B1	AC & W Well	Mather Air Force Base	1950	Mun.	133	10	250		X		X
8N/6E-13E1	Wherry #3	Mather Air Force Base		Mun.	123	12	500			X	X
8N/6E-13P1	Wherry #5	Mather Air Force Base	1951	Mun.	123	12	400		X	X	X
8N/6E-14J1	Wherry #1	Mather Air Force Base	1951	Mun.	112	12	500		X	X	X
8N/6E-14K1	Wherry #2	Mather Air Force Base	1951	Mun.	104	12	400		X		X

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available: Log	Data available: Water levels	Data available: Analyses
8N/6E-14R1	Wherry #4	Mather Air Force Base	1951	Mun.	117	12	500		X	X	X
8N/6E-15P1	0.7 mile east of Happy Lane on Kieffer Blvd., 700 feet east of road behind hot plant and 75 feet east of wash plant.	McGillivray Const. Co.		Aband.	73	12	225			X	
8N/6E-15Q1	0.9 mile west of Excelsior Rd. on Kieffer Blvd., 1500 feet north of road and 250 feet west of fenceline	McGillivray Const. Co.		Aband.	71					X	
8N/6E-16B1	0.45 mile south of Old Placerville Rd. on Happy Lane, 100 feet west of road and 25 feet northeast of house.	C. E. Rand	1951	Dom.	77	10	97		X	X	
8N/6E-16B2	0.35 mile south of Old Placerville Rd. on Happy Lane, 150 feet east of road and 15 feet south of barn.	Fred Matsumoto		Dom. & Irr.	78	12				X	
8N/6E-16B8	0.55 mile south of Old Placerville Rd. on Happy Lane, 150 feet east of road to pumphouse	Y. Furuike	1948	Dom. & Irr.	76	12	95			X	
8N/6E-16G1	0.4 mile south of Old Placerville Rd. on Happy Lane, 175 feet west of road in pumphouse.	L. Matsumoto	1948	Dom. & Irr.	77	12	110			X	
8N/6E-16G2	0.65 mile south of Old Placerville Rd. on Happy Lane, 600 west of road and 15 feet south of fenceline.	Y. Tanaka	1947	Dom. & Irr.	75	12	92			X	
8N/6E-16G3	0.8 mile south of Old Placerville Rd. on Happy Lane, 300 feet west of road and 50 feet south of driveway.	Ted Kobota	1956	Irr.	73		145		X	X	X
8N/6E-16M1	0.2 mile north of Kieffer Blvd. on Bradshaw Rd., 500 feet east of road and 30 feet north of drive.	M. Hashimoto	1931	Dom. & Irr.	72	12	160			X	
8N/6E-16N1	0.1 mile east of Bradshaw Rd. on Kieffer Blvd., 200 feet south of road near storage tank	J. H. Fairbairn		Dom. & Irr.	71					X	
8N/6E-16Q1	0.5 mile east of Bradshaw Rd. on Kieffer Blvd., 150 feet south of road and 40 feet west of drive.	Jack Kawamura	1939	Dom. & Irr.	71	12	280			X	
8N/6E-16Q2	0.5 mile east of Bradshaw Rd. on Kieffer Blvd., 200 feet north of road in tin pumphouse.	Roy S. Kawamura	1937	Dom. & Irr.	70	12	300			X	
8N/6E-16R1	0.15 mile north of Kieffer Blvd. on Happy Lane, 400 feet east of Happy Lane and 100 feet west of Service Rd.	Mather Air Force Base		Aband.	73	12	201			X	
8N/6E-16R2	Mather Engine Test Area at southwest end of runway, in northeast corner of building south of water tank.	Mather Air Force Base	1961	Dom. & Ind.	70		89		X		X
8N/6E-17A1	0.2 mile west of Bradshaw Rd. on Goethe Rd., 300 feet south of road through yard in field.	C. E. Kersey		Dom.	71	12	150			X	
8N/6E-17B1	0.1 mile east of Mayhew Rd. on Goethe Rd., 60 feet southeast of house which is 50 feet south of road.	W. Welander	1959	Dom.	55	10	124		X		X
8N/6E-17B2	0.25 mile south of Goethe Rd. on Mayhew Rd., 50 feet east of house on east side of road in shed.	W. W. Beely	1933	Dom.	65	10	130		X		
8N/6E-17B3	0.2 mile east of Mayhew Rd. on Goethe Rd., 40 feet east of house on south side of road.	R. K. Ewing	1952	Dom.	63		84			X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM – EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available		
									Log	Water levels	Analyses
8N/6E-17C1	0.15 mile south of Goethe Rd. on Mayhew Rd., 45 feet west of house which is 250 feet west of road.	Ted Kobata	1957	Irr.	57	10	160			X	
8N/6E-17E2	0.5 mile west of Mayhew Rd. on Kieffer Blvd., north of garage on north side of road.	Percy Brown	1958	Dom.	62	6	98		X		
8N/6E-17E5	0.5 mile west of Mayhew Rd. on Kieffer Blvd., well north of house on north side of road.	Loyde G. Slatter	1961	Dom.	62	6	104		X		X
8N/6E-17E6	0.45 mile west of Mayhew Rd. on Kieffer Blvd., 600 feet north through orchard to house, in shed northeast of house.	W. Nakahira		Dom.	68		161			X	
8N/6E-17F1	0.3 mile south of Goethe Rd. on Mayhew Rd., 400 feet west at northeast corner of garage.	M. J. Fairbairn	1956	Dom.	67		138		X		
8N/6E-17H1	Northeast corner of Kieffer Blvd. and Bradshaw Rd.	Sacramento County	1962	Mun.	73	12	310		X	X	
8N/6E-17J1	0.2 mile west of Bradshaw Rd. on Kieffer Blvd., 200 feet south to house and 50 feet south to tank house.	Masami Iwasa		Dom. & Irr.	78	12	116			X	
8N/6E-17J3	0.25 mile west of Bradshaw Rd. on Kieffer Blvd., 150 feet south of road at southwest corner of garage.	M. Ouye	1959	Dom.	76	8	175		X		X
8N/6E-18D1	South of U.S. 50 on Manlove Rd. to Sutter's Gold Dr., east to Tango St., fence enclosure at northwest corner.	Citizens Suburban Co.	1955	Mun.	50	12	268		X		X
8N/6E-18F1	Rosemont Subdivision south of Folsom Blvd. on Manlove Rd. Fence enclosure on Montezuma Way.	Citizens Suburban Co.	1959	Mun.	50	14	372		X		X
8N/6E-18J1	0.45 mile west of Mayhew Rd. on Kieffer Blvd., 70 feet south on drive to pumphouse.	T. Matsumoto	1961	Dom. & Irr.	63	8	170		X		
8N/6E-18J3	0.6 mile west of Mayhew Rd. on Kieffer Blvd., south on drive, well in loop of drive.	M. R. Hernandez	1938	Dom.	62	8	78			X	
8N/6E-18L1	50 feet west of Southport Dr. on Kieffer Blvd., 0.1 mile south on private drive, well west side of drive.	C. A. Williamson		Irr.	54					X	
8N/6E-18M1	160 feet south of Kieffer Blvd. on Manlove Rd., 30 feet east of road.	Lauer		Aband.	53		76			X	
8N/6E-18M2	0.15 mile east of Manlove Rd. on Kieffer Blvd., 0.20 mile south on private drive, 160 feet east of drive.	Pauline Calea		Irr.	55	12	142			X	
8N/6E-18N1	0.15 mile east of Manlove Rd. on Jackson Rd., 0.1 mile north of road in field.	W. T. Pierson		Irr. & Stk.	55	12	259		X	X	X
8N/6E-18P1	50 feet west of Southport Dr. on Kieffer Blvd., 0.35 mile south on private drive, south of house on drive.	C. A. Williamson	1940	Dom. & Irr.	58		201			X	
8N/6E-19B1	0.1 mile east of Hedge Ave. on Jackson Rd., 300 feet north on drive, pumphouse 65 feet east of house.	T. Yamamoto		Dom. & Irr.	58		240			X	
8N/6E-19B2	0.1 mile east of Hedge Ave. on Jackson Rd., pumphouse 150 feet north of road and 40 feet east of drive.	Sam Kono	1953	Dom.	60	10	116		X	X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)
b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont)

WELL DATA

FOLSOM – EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available: Log	Water levels	Analyses
8N/6E-19B3	0.1 mile east of Hedge Ave. on Jackson Rd., 350 feet north of road and at the northeast corner of shed.	Sam Kono	1955	Aband.	60	10	151		X	X	
8N/6E-19B4	0.1 mile east of Hedge Ave. on Jackson Rd., 350 feet north of road and at the northeast corner of shed.	Sam Kono	1961	Irr.	61	12	240		X		X
8N/6E-19C2	0.28 mile east of Manlove Rd. on Jackson Rd., 500 feet south of road, 50 feet south of garage.	N. N. O'Hara	1951	Dom.	54		190			X	
8N/6E-19E1	0.25 mile east of Manlove Rd. on Jackson Rd., 0.25 mile south on dirt road, pumphouse west side of road.	W. T. Pierson		Irr.	55					X	
8N/6E-19F1	0.25 mile south of Jackson Rd. on Hedge Ave., 180 feet west of road and 100 feet north of drive.	William J. Franklin, Sr	1955	Dom.	57	10	144		X	X	
8N/6E-19G1	800 feet south of Jackson Rd. on Hedge Ave., house 200 feet east of road, well 50 feet southwest of house.	William R. Hastoo	1955	Dom.	57	12	156		X		
8N/6E-19G2	0.2 mile east of Hedge Ave. on Jackson Rd., 350 feet south of road, pumphouse east of fenceline.	M. Shiro	1959	Irr.	57	12	225		X		
8N/6E-19H2	0.55 mile east of Hedge Ave. on Jackson Rd., house 150 feet south of road and well 150 feet south of house.	F. J. Shiro	1959	Dom.	62	10	110		X		
8N/6E-19H3	0.45 mile east of Hedge Ave. on Jackson Rd., 250 feet south of road and south of house.	Sam DeGregorio	1959	Dom.	61	8	123		X	X	
8N/6E-19L1	0.43 mile south of Jackson Rd. on Hedge Ave., 20 feet west of house on west side of road.	A. G. Vanderboom	1955	Irr.	58	10	187		X	X	
8N/6E-19L2	0.43 mile south of Jackson Rd. on Hedge Ave., 12 feet southeast of garage on west side of road.	A. G. Vanderboom		Dom.	58	8				X	
8N/6E-19P1	0.55 mile south of Jackson Rd. on Hedge Ave., 40 feet west of road and south of drive.	Gunter and Farris		Dom.	58		80			X	
8N/6E-19P2	200 feet north of Fruitridge Rd. on Hedge Ave., 70 feet west of road on south side of house.	T. E. Kadoya	1957	Dom.	56		244		X	X	
8N/6E-19P5	850 feet north of Fruitridge Rd. on Hedge Ave., 530 feet west on dirt road, north of dirt road and 200 feet east of house.	J. Seaboat	1956	Dom. & Irr.	50	8	142		X		
8N/6E-19Q1	400 feet north of Fruitridge Rd. on Hedge Ave., pumphouse northeast of Sierra Enterprise School and east of road.	Elk Grove Unified School District	1955	Dom.	55	12	310		X		
8N/6E-19Q2	1200 feet east of Hedge Ave. on Fruitridge Rd., pumphouse 500 feet north of road in field.	T. E. Kadoya		Irr.	58					X	
8N/6E-19R1	0.5 mile east of Hedge Ave. on Fruitridge Rd., 200 feet north of Fruitridge Rd. and 80 feet west of private road.	Leon Bryant	1960	Dom.	56	10	135		X	X	
8N/6E-20D1	0.6 mile east of Hedge Ave. on Jackson Rd., 0.2 mile north on drive, 300 feet northeast of office building and west of plant.	United Concrete Pipe	1960	Ind.	63	12	253			X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)
b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available: Log	Water levels	Analyses
8N/6E-20D2	0.7 mile east of Hedge Ave. on Jackson Rd., 0.2 mile north on drive, south of parking lot.	E. P. Garcia		Dom.	65		268			X	
8N/6E-20E2	0.55 mile east of Hedge Ave. on Jackson Rd., 220 feet south on drive, 75 feet east of drive.	L. E. Ruth	1956	Dom.	62	10	115		X		
8N/6E-20E5	0.3 mile west of Mayhew Rd. on Jackson Rd., house north of road, 40 feet west and 35 feet north of house.	W. M. Kashiwagi	1952	Dom.	63	8	132			X	
8N/6E-20F1	0.25 mile west of Mayhew Rd. on Jackson Rd., house north of road, pumphouse 30 feet north of house.	Y. Kashiwagi		Aband.	63		80			X	
8N/6E-20F3	0.9 mile east of Hedge Ave. on Jackson Rd., 650 feet north of road in field, east of fenceline.	Van Cook Estate		Irr.	66					X	
8N/6E-20F6	0.3 mile north of Jackson Rd. on Mayhew Rd., 200 feet southwest of house on west side of road.	LeBlanc	1955	Dom.	61	12	144		X		
8N/6E-20H1	0.35 mile north of Jackson Rd. on Bradshaw Rd., 210 feet west of road and 30 feet southwest of house.	J. H. Fairbairn		Irr.	69					X	
8N/6E-20H2	0.6 mile east of Hedge Ave. on Jackson Rd., 600 feet north of road and 225 feet north of house.	Nils Olson	1959	Dom.	63	10	150		X		
8N/6E-20J3	400 feet north of Jackson Rd. on Bradshaw Rd., 150 feet west of house on west side of road in a shed.	L. Magnussen		Dom. & Irr.	65	12	90			X	
8N/6E-20J5	0.1 mile west of Bradshaw Rd. on Jackson Rd., 50 feet south on drive and 50 feet east of drive in pumphouse.	E. P. Morgan	1959	Dom.	63	12	110		X		
8N/6E-20M1	0.4 mile west of Mayhew Rd. on Jackson Rd., 800 feet south of road, well on west side of old tank house.	K. Kunitake	1959	Irr.	64	12	232		X	X	
8N/6E-20N1	0.3 mile west of Mayhew Rd. on Fruitridge Rd., 700 feet north of paved road, 50 feet west of house, 75 feet west of road.	King	1961	Dom.	60		125			X	
8N/6E-20N2	0.3 mile west of Mayhew Rd. on Fruitridge Rd., 700 feet north on paved road, pumphouse east of house east side of road.	William Newton	1959	Dom.	60	10	205		X	X	
8N/6E-20N4	0.62 mile east of Hedge Ave. on Fruitridge Rd., pumphouse 60 feet north of house on north side of road.	J. Sheradovsni	1959	Dom.	55	10	130		X		
8N/6E-20R1	0.22 mile south of Jackson Rd. on Bradshaw Rd., 180 feet west of road and 40 feet northwest of house.	McDaniel	1953	Dom.	58	10	94		X	X	
8N/6E-21C1	0.4 mile south of Kieffer Blvd. on Bradshaw Rd., 0.4 mile east, 350 feet north to pumphouse.	J. Kawamura	1926	Dom. & Irr.	71	12	350			X	
8N/6E-21C2	0.4 mile south of Kieffer Blvd. on Bradshaw Rd., 0.4 mile east, 600 feet south to pumphouse.	C. Bobo		Dom. & Irr.	68	12	170			X	
8N/6E-21F1	0.5 mile south of Kieffer Blvd., 0.36 mile east of road, pumphouse 40 feet south of house.	M. H. Takehara		Irr.	70	12				X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM – EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available: Log	Data available: Water levels	Data available: Analyses
8N/6E-21L1	0.25 mile east of Bradshaw Rd. on Jackson Rd., 1700 feet north of road in corner of field	H. Nielson		Irr.	65	12				X	
8N/6E-21M2	200 feet east of Bradshaw Rd. on Jackson Rd., north of road and west of house.	P. Takehara	1961	Dom.	66	12					X
8N/6E-21N1	0.25 mile east of Bradshaw Rd. on Jackson Rd., 200 feet south of road in shed.	F. Umeda		Irr.	63	12	250			X	X
8N/6E-21N2	80 feet south and 55 feet east of intersection of Bradshaw Rd. and Jackson Rd., northwest corner of paved area.	Hancock Oil Co.		Dom.	63					X	X
8N/6E-22B1	0.8 mile west of Excelsior Rd. on Kieffer Blvd., 350 feet south of road and 300 feet east of fenceline.	McGillivray Const.		Ind.	75	12				X	
8N/6E-22R1	0.75 mile north of Jackson Rd. on Excelsior Rd., 220 feet west to house, well west of house.	E. Nivison	1956	Dom. & Irr.	92	12	158		X	X	X
8N/6E-25J1	0.8 mile south of Kieffer Blvd. on Eagles Nest Rd., 200 feet west of road and 25 feet south west of house.	L. Reedy	1953	Dom.	140						X
8N/6E-25K2	0.5 mile west of Eagles Nest Rd. on Jackson Rd., 0.45 mile north to house, 200 feet north of house.	R. Clemons		Aband.	140	4	127			X	
8N/6E-25P1	0.68 mile west of Eagles Nest Rd. on Jackson Rd., pumphouse 150 feet north of road.	J. Hutcheson	1947	Dom.	135	8	130		X	X	
8N/6E-26H1	1.05 mile west of Eagles Nest Rd. on Jackson Rd., 0.35 mile north drive, 65 feet north of house and south of reservoir.	C. Harry	1950	Irr.	131	12	160			X	
8N/6E-26H2	1.05 mile west of Eagles Nest Rd. on Jackson Rd., 0.35 mile north on drive, pumphouse 35 feet west of Westerly Cabin.	C. Harry	1955	Dom.	128	12	192		X		X
8N/6E-26K1	0.85 mile west of Eagles Nest Rd. on Jackson Rd., 110 feet north of road and east of house.	F. Ham		Dom. & Irr.	124	8				X	
8N/6E-26M1	0.25 mile east of Excelsior Rd. on Jackson Rd., 50 feet south of road and 6 feet south of abandoned well.	J. Parker		Dom. & Irr.	121		560			X	
8N/6E-26M2	0.25 mile east of Excelsior Rd. on Jackson Rd., 50 feet south of road and 5 feet north of operating well.	J. Parker		Aband.	121		134			X	
8N/6E-27F1	0.8 mile west of Excelsior Rd. on Jackson Rd., 300 feet south of road and 30 feet west of house.	H. Tamano		Dom. & Irr.	85					X	
8N/6E-27G2	0.4 mile west of Excelsior Rd. on Jackson Rd., south of road and 5 feet west of windmill, southwest of house.	J. Craig		Dom.	87					X	X
8N/6E-27G3	0.4 mile west of Excelsior Rd. on Jackson Rd., south of road under windmill and southwest of house.	J. Craig		Aband.	88					X	
8N/6E-27G4	0.35 mile west of Excelsior Rd. on Jackson Rd., 250 feet north of road and at northwest corner of house.	M. Tufts		Dom.	87	8	127		X	X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)
b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available: Log	Water levels	Analyses
8N/6E-27H1	0.2 mile west of Excelsior Rd. on Jackson Rd., 300 feet south of road in northwest corner of shed.	F. Koenig	1921	Aband.	93		165			X	
8N/6E-27H2	0.2 mile west of Excelsior Rd. on Jackson Rd., 300 feet south of road and 5 feet north of tank on wood stand.	F. Koenig	1955	Dom. & Irr.	94	12	425		X	X	X
8N/6E-27J1	0.2 mile south of Jackson Rd. on Excelsior Rd., 700 feet west of road near stream.	H. Stout	1955	Dom. & Irr.	85	10	143		X		
8N/6E-27L1	0.7 mile west of Excelsior Rd. on Elder Creek Rd., 0.4 mile north of road in field.	R. Harry		Irr.	82					X	
8N/6E-27N1	0.7 mile west of Excelsior Rd. on Elder Creek Rd., 150 feet north of road on west side of drive.	R. Harry		Dom.	80					X	
8N/6E-27N2	0.7 mile west of Excelsior Rd. on Elder Creek Rd., 0.25 mile north of road in field.	R. Harry		Irr.	86					X	
8N/6E-27R1	0.3 mile south of Jackson Rd. on Excelsior Rd., 200 feet west of road and 20 feet southwest of shed.	F. Ritchie		Dom.	117					X	
8N/6E-28A1	0.85 mile east of Bradshaw Rd. on Jackson Rd., 100 feet south of road and west of water tower.	G. Corpe		Dom.	63					X	
8N/6E-28C1	0.55 mile east of Bradshaw Rd. on Jackson Rd., 400 feet south of road and south side of porch on house.	R. Agresti		Dom. & Irr.	64					X	
8N/6E-28D1	0.8 mile north of Elder Creek Rd. on Bradshaw Rd., 200 feet east of road in open field.	J. Kawanishi		Dom. & Irr.	59	12				X	
8N/6E-28E1	0.65 mile north of Elder Creek Rd. on Bradshaw Rd., 300 feet east of road in field behind garage.	F. Souza, Jr.		Dom.	58	12	147		X		X
8N/6E-28F1	0.70 mile north of Elder Creek Rd. on Bradshaw Rd., 0.45 mile east on drive in field.	M. Takeoka		Irr.	62					X	
8N/6E-28L1	0.5 mile east of Bradshaw Rd. on Elder Creek Rd., 0.3 mile north on drive at entrance to old cemetary.	C. Meyers	1961	Irr.	67	10	200			X	X
8N/6E-28L2	0.25 mile north of Elder Creek Rd. and 600 feet west of road to cemetary in field.	M. Cruise	1960	Irr.	64		326		X	X	
8N/6E-28M1	0.4 mile north of Elder Creek Rd. on Bradshaw Rd., 100 feet east of road and south of house.	R. Jones		Dom. & Irr.	60	12	275			X	
8N/6E-28M2	0.3 mile north of Elder Creek Rd. on Bradshaw Rd., east of road in northwest corner of fenced field.	G. Aman	1955	Aband.	61	10	157		X	X	
8N/6E-28P1	0.35 mile east of Bradshaw Rd. on Elder Creek Rd., 50 feet north of road and east of drive.	J. Knight	1955	Irr.	70	12	320		X	X	
8N/6E-28P2	0.45 mile east of Bradshaw Rd. on Elder Creek Rd., 100 feet north of road between house and barn.	M. Cruise		Dom.	71					X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

WELL DATA

FOLSOM – EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available		
									Log	Water levels	Analyses
8N/6E-28P3	0.45 mile east of Bradshaw Rd. on Elder Creek Rd., 100 feet north of road, in pumphouse west of barn.	M. Cruise		Dom.	72					X	
8N/6E-29C1	1000 feet west of Mayhew Rd. on Fruitridge Rd., 500 feet south of road and 20 feet south of house.	G. Artz	1953	Dom. & Irr.	60	14	78		X	X	
8N/6E-29D1	0.5 mile east of Hedge Ave. on Fruitridge Rd., 400 feet south on drive, 200 feet east in field.	G. Artz	1953	Irr.	55	12	240		X		
8N/6E-29E2	0.5 mile east of Hedge Ave. on Fruitridge Rd., 0.35 mile south, 0.1 mile east and 0.1 mile south on drive, southwest of house.	S. Smith		Dom.	53	10	150		X		
8N/6E-29F1	0.5 mile east of Hedge Ave. on Fruitridge Rd., 0.35 mile south and 0.1 mile east on drive, 500 feet east of house in field.	L. Cook		Dom. & Irr.	55					X	X
8N/6E-29H1	0.55 mile north of Elder Creek Rd. on Bradshaw Rd., 500 feet west of road at southeast corner of vineyard	F. Mukai		Dom. & Irr.	59	12				X	
8N/6E-29J2	0.48 mile north of Elder Creek Rd. on Bradshaw Rd., 1200 feet west of road on drive.	J. Ruzich Realty		Aband.	61	12	98			X	
8N/6E-29L1	0.47 mile north of Elder Creek Rd. on Mayhew Rd., 150 feet west of road, pumphouse south side of drive	J. Legare		Dom. & Irr.	54	12				X	
8N/6E-29N2	0.5 mile east of Hedge Ave. on Elder Creek Rd., 65 feet north of road and 50 feet east of house.	L. Garrett		Dom.	55	10	87			X	
8N/6E-29P1	350 feet west of Mayhew Rd. on Elder Creek Rd., 50 feet north of road on north side of garage.	Gov Realty		Dom.	59	10	108			X	
8N/6E-29P2	800 feet west of Mayhew Rd. on Elder Creek Rd., 130 feet north of road, 50 feet north of house.	W. Franklin	1959	Dom.	58		110		X		X
8N/6E-29Q1	0.25 mile west of Bradshaw Rd. on Elder Creek Rd., 125 feet north of road and 25 feet north of house.	B. Fletcher		Dom.	59					X	
8N/6E-29Q2	Northeast corner of intersection of Mayhew Rd. and Elder Creek Rd., 50 feet northeast of house.	J. Colangelo	1961	Dom.	59					X	
8N/6E-30A1	0.25 mile south of Fruitridge Rd. on Hedge Ave., 0.35 mile east on dirt road, 60 feet east of last house.	L. Mize		Dom.	56						
8N/6E-30A2	0.25 mile east of Hedge Ave. on Fruitridge Rd., south of road in garage.	A. Smith		Dom.	53	12	94			X	
8N/6E-30B1	0.16 mile east of Hedge Ave. on Fruitridge Rd., 60 feet south of road and 50 feet east of house.	B. Caldwell		Dom.	52	12	90			X	
8N/6E-30B8	0.13 mile south of Fruitridge Rd. on Hedge Ave., 70 feet east of road and 20 feet south of house.	M. Rodriquez	1959	Irr.	52	12	150		X		
8N/6E-30C1	0.2 mile south of Fruitridge Rd. on Hedge Ave., 20 feet west of road inside fence of sewage plant.	Sacramento County	1955	Dom.	50	8	164		X		X

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)
b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM – EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available		
									Log	Water levels	Analyses
8N/6E-30L1	0.3 mile north of Elder Creek Rd. on Hedge Ave., 240 feet west of road in pumphouse.	B. Orrick		Dom.	56	8	115			X	
8N/6E-30Q1	0.25 mile north of Elder Creek Rd. on Hedge Ave., west on drive, well 100 feet south of house.	V. Tudesco		Irr.	60		150			X	
8N/6E-30R1	0.5 mile east of Hedge Ave. on Elder Creek Rd., 0.2 mile north on drive, 25 feet east of house	J. Hicks		Irr. & Dom.	57					X	
8N/6E-33B1	0.8 mile east of Bradshaw on Elder Creek Rd., 0.25 mile south on drive, south of barn by corral.	R. Harry		Dom. & Irr.	77					X	X
8N/6E-33M1	0.3 mile north of Florin Rd. on Bradshaw Rd., 100 feet east of road in concrete pit north of drive.	G. Ioki		Dom.	61					X	
8N/6E-33N1	150 feet east of Bradshaw Rd. and 50 feet north of Florin Rd., between house and barn.	Bowers		Dom. & Irr.	66					X	
8N/6E-33R1	0.75 mile east of Bradshaw Rd. on Florin Rd., 0.2 mile north on drive by shed.			Aband.	76	16				X	
8N/6E-34C1	0.55 mile west of Excelsior Rd. on Elder Creek Rd., 250 feet south of road behind house.	E. Seely		Dom.	91		150			X	
8N/6E-34L2	0.5 mile west of Excelsior Rd. on Florin Rd., 900 feet north, 600 feet west and 0.2 mile north on drive in field.	Salvadori		Irr.	92					X	
8N/6E-34M1	1.0 mile west of Excelsior Rd. on Florin Rd., 0.5 mile north of drive, 250 feet east of drive in field.	S. Beg		Irr.	82					X	
8N/6E-34P1	0.5 mile west of Excelsior Rd. on Florin Rd., 900 feet north of drive, west side of ditch.	Salvadori		Irr.	79					X	
8N/6E-34P2	0.55 mile west of Excelsior Rd. on Florin Rd., 120 feet north of road and 20 feet west of house.	Salvadori		Dom.	81					X	
8N/6E-34R1	0.25 mile west of Excelsior Rd. on Florin Rd., 150 feet north of road behind garage.	T. Dutra		Dom. & Irr.	106		300			X	X
8N/6E-35F1	0.25 mile south of Elder Creek Rd. on Excelsior Rd., 0.35 mile east of road in field.	B. Barnby		Irr.	120		240			X	
8N/6E-36B2	0.35 mile west of Eagles Nest Rd. on Jackson Rd., 100 feet south of road behind building.	Eagles Nest Tavern		Dom.	141		150			X	
8N/7E- 2N1	2.5 miles north on Grant Line Rd. from bend in road, 100 feet east of road and 130 feet south of house in shed.	J. Tracy	1956	Irr.	258	14	675		X	X	X
8N/7E- 4F1	1.4 miles north of Douglas Rd. on Plant road, 2000 feet west on paved road, north side of road.	Douglas Aircraft	1961	Ind.	200	12	175			X	X
8N/7E- 8N1	0.2 mile east of Citrus Rd. on Douglas Rd., 600 feet south of road in open field.	D. Sapp		Aband.	172	10	102			X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM – EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available		
									Log	Water levels	Analyses
8N/7E- 9H1	0.15 mile north of Douglas Rd. on plant road, 30 feet north of tank on west side of road.	Douglas Aircraft	1956	Dom. & Ind.	212	12	320		X	X	
8N/7E- 9K1	800 feet north of Douglas Rd. on plant road, 1000 feet west of plant road in metal pumphouse.	Douglas Aircraft	1956	Dom. & Ind.	207	12	296		X	X	X
8N/7E- 9N1	0.3 mile south of Douglas Rd. on Dury Rd., 0.1 mile east and 180 feet north on drive, 6 feet south of house.	F. O'Hanneson		Dom.	190					X	X
8N/7E-12N1	0.4 mile south of Douglas Rd. on Grant Line Rd., 1.2 mile east on farm road.			Dom.	210						X
8N/7E-14C1	0.4 mile south of Douglas Rd. on Grant Line Rd., 0.45 mile east on dirt road to windmill.	Russel Brothers	1936	Stk.	255	8	208		X	X	X
8N/7E-18E1	Golf Course Well No. 1	Mather Air Force Base		Irr.	125	12					
8N/7E-18F1	Golf Course Well No. 2	Mather Air Force Base	1957	Irr.	137	12	403		X		
8N/7E-19D1	Sac. Ord. Well	Mather Air Force Base		Dom. & Irr.	151						
8N/7E-22G1	2.5 miles north of Jackson Rd. on Grant Line Rd., 0.25 mile west on dirt road, north side of road.	Clinch Trustees	1963	Test Hole	222	10	210		X	X	X
8N/7E-26Q2	0.45 mile west of Jackson Rd. on Kieffer Blvd., 0.2 mile north on dirt road 0.7 mile west, 50 feet south of reservoir.	Tudesko Brothers		Irr.	148						X
8N/7E-29L1	0.5 mile north of Jackson Rd. on Connor Rd. east thru gate on farm rd., 200 feet west of windmill.	M. Waegell	1963	Test Hole	125	12	130		X	X	X
8N/7E-29P1	0.6 mile north of Jackson Rd.on Connor Rd., 0.4 mile east of road in field by tank.	M. Waegell		Stk.	122					X	
8N/7E-30A1	0.25 mile west of Connor Rd. on Kieffer Blvd., 300 feet south of road and west of building.	Sacramento Rendering Company	1956	Dom. & Ind.	148	12	420		X		X
8N/7E-31H1	0.2 mile west of Connor Rd. on Jackson Rd., 400 feet south of road and 75 feet east of drive in building	Gretch		Dom.	122		280			X	
8N/7E-31J1	0.2 mile south of Jackson Rd. on Connor Rd., 100 feet west of road in field.	Gretch	1952	Irr.	116	14	300			X	
8N/7E-31L1	0.4 mile south of Jackson Rd. on Eagles Nest Rd., 0.5 mile east and 500 feet south on dirt road, at northeast corner of reservoir.	E. Carli	1951	Irr.	122		300			X	
8N/7E-31M1	0.5 mile south of Jackson Rd. on Eagles Nest Rd., 70 feet east of road and 50 feet northwest of house.	E. Carli		Dom. & Irr.	126	12	340			X	X
8N/7E-31M2	0.5 mile south of Jackson Rd. on Eagles Nest Rd., 800 feet east of road and 200 feet north of reservoir.	E. Carli	1941	Irr.	124		340			X	
8N/7E-33E1	0.2 mile north of Jackson Rd. on Grant Line Rd., 125 feet east of road and 40 feet north of house.	W. Thomas		Dom. & Irr.	145	10	130			X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont)

WELL DATA

FOLSOM – EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available: Log	Data available: Water levels	Data available: Analyses
8N/7E-33N1	300 feet east of Grant Line Rd. on Jackson Rd., 200 feet north of road.	W. Bryant	1952		146	12	187				X
8N/7E-33R1	100 feet south of Jackson Rd. and 225 feet west of Sheldon Rd., 100 feet north of house.	T. Murphy		Dom.	197	10	185			X	
9N/6E-13J3	0.1 mile east of Old Fair Oaks Bridge, 6 feet north of Old Citrus Rd., 30 feet east of house.	R. Loehr	1925	Dom.	101	8	65			X	
9N/6E-13Q1	200 feet south of Old Fair Oaks cut off by New Fair Oaks Bridge, 400 feet west of Citrus Rd. and 75 feet north of trailer house.	Natomas Land Company		Dom.	99	8	108			X	X
9N/6E-23Q2	0.67 mile northeast of Cordova Lane on Coloma Rd., 120 feet south of road in garage.	J. Lowery	1946	Dom.	100	10	125		X	X	X
9N/6E-24J1	0.2 mile south of Coloma Rd. on Citrus Rd., 0.15 mile east of Citrus Rd., east side of laundry.	Finer Homes, Inc.	1962	Dom.	115	16	410		X	X	X
9N/6E-24K2	200 feet north of Coloma Rd. and 300 feet west of Citrus Rd. Pumphouse 10 feet north of shed.	Henry Leavett	1958	Dom.	113		147		X		
9N/6E-24M1	0.5 mile west of Citrus Rd. on Coloma Rd., 260 feet south of road between houses.	D. Beach		Aband.	108		45		X		
9N/6E-24M2	0.5 mile west of Citrus Rd. on Coloma Rd., 250 feet south of road and 35 feet south of house.	D. Beach	1958	Dom.	108	10	140		X		X
9N/6E-25D1	150 feet west of Elmanto Dr. on Mapola Way, north side in fence enclosure, Natomas No. 11	Natomas Water Company	1959	Mun.	102	12	468		X	X	X
9N/6E-25G1	400 feet east of Citrus Rd. and 120 feet south of Folsom Blvd. Pumphouse 15 feet west of building.	J. Selinger	1951	Dom.	114	12	105		X	X	
9N/6E-25H1	500 feet west of railroad crossing on Folsom Blvd., 150 feet north of road and northeast of Edwards Motel	J. Edward	1913	Dom.	115	7				X	X
9N/6E-25L1	0.45 mile west of Citrus Rd. on Folsom Blvd., pumphouse 150 feet south of road and 15 feet northwest of house.	W. Riggs			108	12	110			X	
9N/6E-25L2	1100 feet east of Kilgore Rd. on Folsom Blvd., pumphouse 130 feet south of road and 300 feet east of building.	J. Parshall	1955	Ind.	108	12	117		X		
9N/6E-25L3	150 feet east of Kilgore Rd. and 200 feet south of Folsom Blvd., pumphouse at southeast corner of main building.	J. Tulley Estate	1958	Ind.	108	10	128		X		
9N/6E-25N1	250 feet south of Folsom Blvd. on Kilgore Rd., 110 feet west of road in tank house behind old school	Folsom Unified School District		Dom.	113					X	
9N/6E-25P1	0.2 mile south of Folsom Blvd. on Kilgore Rd., 250 feet east of road on east side of drive between buildings	Van Valkenburgh and Company	1961	Ind.	115	10	180			X	X
9N/6E-25Q1	200 feet north of Mathew Kilgore Cemetary on Kilgore Rd., 600 feet east of road in gravel pit.	Brighton Sand & Gravel	1959	Ind.	87	12	191		X	X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont)

WELL DATA

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available		
									Log	Water levels	Analyses
9N/6E-25R1	0.35 mile south of Folsom Blvd. on Citrus Rd., 300 feet east of road in fence enclosure at south side of building.	International Association of Machinests	1959	Dom.	123	12	230		X	X	X
9N/6E-26B1	150 feet west of Pinturo Way on Campana Way, 75 feet south of road.	F. Williamson	1946	Irr.	100	12	110			X	
9N/6E-26C1	0.1 mile east of Cordova Lane on Coloma Rd., 120 feet south of road in pumphouse west side of garage.	G. Peterson	1942	Dom. & Irr.	96	6	87			X	
9N/6E-26E1	West of Blackstone Dr. on Georgetown Dr., south side of road in fence enclosure, Natomas No. 7	Natomas Water Company	1959	Mun.	95	12	556		X	X	
9N/6E-26E2	0.14 mile southwest of Cordova Lane on Coloma Rd., 175 feet north of road, pumphouse north side of garage.	F. Williamson		Dom.	93	12	98		X	X	
9N/6E-26J1	Southeast corner of McGregor Dr. and Glenhaven Way south of swimming pool in fence enclosure, Natomas No. 9.	Natomas Water Company	1959	Mun.	100	12	460		X	X	X
9N/6E-26L1	North of Zibibba Way on Negrara Way south side of road in fence enclosure, Natomas No. 10.	Natomas Water Company	1959	Mun.	93	12	416		X	X	X
9N/6E-27H1	North of Woodbridge Way on Woodcliff Dr. east side of road in fence enclosure, Natomas No. 12.	Natomas Water Company		Mun.	90					X	
9N/6E-27K1	0.25 mile north of Coloma Rd. through Sierra Madre Apts., 25 feet east of old house.	Cordova Apartment Corporation		Dom.	86	12	120			X	
9N/6E-27L1	North end of Chase Drive.	Rancho Cordova Sewage Treatment Plant	1955	Dom.	70	8	124		X		X
9N/6E-27R1	West of Chardonay Dr. on Dolecetto Dr., north side of road in fence enclosure, Natomas No. 6.	Natomas Water Company	1956	Mun.	88	12	405		X	X	X
9N/6E-33R1	0.35 mile north of Folsom Blvd. through Motor Movies Lot, 5 feet east of shed at north side of lot.	W. Elliot		Dom.	74	8	85			X	
9N/6E-33R2	800 feet north of intersection of Folsom Blvd. and Routiers Rd.	W. Elliot		Irr.	74	12				X	
9N/6E-33R3	0.45 mile west of Mather Field Dr. on Folsom Blvd., north on palm lined drive, 50 feet north of house.	J. Dauenhauer	1959	Dom.	74	12	130		X		
9N/6E-34C1	North of Rinda Dr. on Agnes Circle, south of road in fence enclosure, Natomas No. 8.	Natomas Water Company	1959	Mun.	81	12	470		X	X	
9N/6E-34E1	0.35 mile west of Mather Field Drive on Folsom Blvd., 0.35 mile north, 0.25 mile east of Farm Rd., 0.1 mile north in field.	J. Dauenhauer		Irr.	65	12	60			X	
9N/6E-34G1	South of Dolecetto Dr. on Gilbert Way, west side of road in fence enclosure, Natomas No. 3.	Natomas Water Company	1955	Mun.	86	12	240		X	X	X
9N/6E-34L1	North of Malaga Way on El Segundo Dr., west side of street in fence enclosure, Natomas No. 4.	Natomas Water Company	1935	Mun.	80		121		X	X	

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM – EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available		
									Log	Water levels	Analyses
9N/6E-34M2	South of Malaga Way on Las Tunas Court to end of street, west of street near pressure tank.	Citizens Suburban Co.	1962	Mun.	60	14	308		X	X	
9N/6E-34N1	0.45 mile west of Mather Field Dr. on Folsom Blvd., 200 feet north of road and 60 feet east of palm lined drive.	J. Dauenhauer		Irr.	74	10	135			X	
9N/6E-34P1	400 feet south of Folsom Blvd. on Mather Field Dr., 150 feet east of road under windmill frame.	F. Kapaun	1946	Dom.	82	12	82			X	
9N/6E-34P6	400 feet east of Mather Field Dr. on Folsom Blvd., northwest of Standard Service Station.	W. Dauenhauer	1954	Dom.	76	10	101		X		
9N/6E-34P7	150 feet west of Mather Field Dr. on Folsom Blvd., 50 feet northeast of Air Flight Drive-In Restaurant.	E. Hageman	1956	Dom.	77	10	106		X		
9N/6E-34R1	0.5 mile east of Folsom Blvd. on White Rock Rd., 140 feet south of road across from White Rock School	Cordova Recreation and Park District	1950	Dom.	97	10	112		X	X	
9N/6E-34R2	0.5 mile east of Folsom Blvd. on White Rock Rd., south of road in shed south of house.	V. Parrick		Dom.	97						X
9N/6E-35C2	West of Zinfandel Dr. at intersection of Zinfandel Dr. and Alicante Way in fence enclosure, Natomas No. 1.	Natomas Water Company		Mun.	97					X	X
9N/6E-35C3	North side of Rancho Cordova Post Office in Cordova Village Shopping Center, Natomas No. 2.	Natomas Water Company		Mun.	97					X	X
9N/6E-35M1	East of Mills Park Dr. on Marcel Way, south of street in fence enclosure, Natomas No. 5.	Natomas Water Company	1956	Mun.	94	12	480		X	X	X
9N/6E-36J1	150 feet east of Citrus Rd. and 150 feet north of White Rock Rd. at north side of paved area of service station.	Aerojet General	1958	Dom.	116	12	181		X	X	X
9N/6E-36K1	80 feet south of White Rock Rd. at intersection of Kilgore Rd., 50 feet west of drive and north of oil refinery.	H. McDuffee	1954	Ind.	113	12	110		X	X	X
9N/7E-10Q1	700 feet northeast of Folsom Blvd. from intersection U.S. 50 and Folsom cutoff, 500 feet north on drive, pumphouse 40 feet south of garage.	Department of Parks and Recreation, State of California	1936	Dom.	170	8	318			X	
9N/7E-10Q2	500 feet north of Folsom Blvd. and 175 feet east of U.S. 50, 300 feet west of park residence by Nimbus Lake.	Department of Parks and Recreation, State of California		Aband.	167		139			X	
9N/7E-12L1	0.36 mile north of U. S. 50 on Prairie City Rd., 60 feet west of road and south of storage pond.	M. Brown	1949	Aband.	293	12	100			X	
9N/7E-12Q1	400 feet north of U. S. 50 on Prairie City Rd., 300 feet east of road and 50 feet south of house.	M. Brown	1949	Dom.	300	10	130			X	X
9N/7E-12Q2	950 feet west of Prairie City Rd. on U. S. 50, 50 feet north of hwy. and west of siphon.	Department of Parks and Recreation, State of California	1947	Aband.	295		60		X		

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 5 (Cont.)

WELL DATA

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available		
									Log	Water levels	Analyses
9N/7E-15E1	200 feet west of Alder Creek on Folsom Blvd., 20 feet north of road in Trailer Park.	Shady Oaks Investment Company		Dom.	143	12	185			X	
9N/7E-15F4	0.32 mile southwest of Folsom cutoff on Folsom Blvd., 150 feet south of road across railroad tracks.	W. Casten		Dom.	157	8	95			X	
9N/7E-15F5	0.42 mile southwest of Folsom cutoff on Folsom Blvd., 250 feet southwest of Natomas Ditch and 40 feet north of road.	Y. Ehrhadt	1947	Dom.	156	10	50			X	
9N/7E-15M3	0.52 mile southwest of Folsom cutoff on Folsom Blvd., 100 feet north of road between houses.	N. Rodgers		Dom.	148	10	83				X
9N/7E-16A1	800 feet north of U. S. 50 and west of Alder Creek, 100 feet north of chicken house	Department of Parks and Recreation, State of California		Aband.	132	12				X	
9N/7E-16G1	North of U. S. 50 on Nimbus Rd. to Fish Hatchery, 0.25 mile east, north of drive in shed.	Department of Parks and Recreation, State of California		Dom.	132					X	X
9N/7E-16H1	600 feet north of U. S. 50 on west bank of Alder Creek, northeast of building.	Department of Parks and Recreation, State of California		Dom.	130	12					X
9N/7E-16J1	2000 feet east of Nimbus on Folsom Blvd., 500 feet north of road and 175 feet north of house.	W. Clarkson		Dom.	150	8	120				X
9N/7E-16K1	0.1 mile west of Aerojet General Corporation Gate #2 on Folsom Blvd., 450 feet north of road and 20 feet west of house.	H. Greenhalgh			150						X
9N/7E-16P1	250 feet west of Libbys Cannery at Nimbus Rd. on Folsom Blvd. 150 feet north of road behind houses.	Natomas Land Company		Dom.	145	6					X
9N/7E-16P2	300 feet west of Nimbus Rd. on Folsom Blvd., 40 feet north of road and 30 feet east of Jet Club.	R. Thompson		Dom.	143						X
9N/7E-16Q1	150 feet east of Nimbus Rd. and 50 feet north of Folsom Blvd. in pumphouse.	Libby, McNiel & Libby Company	1950	Ind.	144		185			X	X
9N/7E-16Q2	East of Nimbus Rd. on Folsom Blvd., 50 feet north of road and east of main building at easterly fenceline	Libby, McNiel & Libby Company	1956	Ind.	145	12	138		X	X	X
9N/7E-17N1	Gravel plant east of Old Fair Oaks Bridge, 0.5 east on East Haul Road, 100 feet west on hill.	Pacific Cement and Aggregate Company	1963	Test Hole	112	12	72		X	X	X
9N/7E-18M1	In gravel plant yard, east of office and washer plant, 100 feet south of Grizzlie.	Pacific Cement and Aggregate Company	1960	Ind.	113	16	502		X		X
9N/7E-19B1	0.5 mile south of gravel plant yard on South Haul Rd., 150 feet southeast of and in Y of road.	Pacific Cement and Aggregate Company	1963	Test	102	12	80		X	X	X
9N/7E-21D1	2,800 feet west of Nimbus Rd. on Folsom Blvd., south of road	Air Products and Chemical Incorporated	1956	Ind.	141	10	450		X	X	X

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)

b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE I (Cont.)

WELL DATA

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

State well number and other number	Location	Owner	Date completed	Use [a]	Ground surface elevation [b]	Size of casing in inches	Total depth in feet	Intervals of perforated casing in feet	Data available: Log	Data available: Water levels	Data available: Analyses
9N/7E-23L1	High thrust area, north of Buffalo Creek and west of road leading into line 4 from the northeast.	Aerojet General Corporation	1962	Test Well	250	8	67		X	X	X
9N/7E-24H1	Liquid area, east of railroad spur and west of Prairie City Road.	Aerojet General Corporation	1962	Test Well	299	8	60		X	X	X
9N/7E-25D1	0.9 mile west of Prairie City Rd. on White Rock Rd., 100 feet north of road and 200 feet east of Aerojet Entrance No. 7.	Aerojet General Corporation		Aband.	288					X	
9N/7E-26H1	7.5 miles east of Mills on White Rock Rd., south side of road in green octagonal house.	F. Olson		Dom.	280		25				X
9N/7E-26J1	0.4 mile east of Grant Line Rd. on White Rock Rd., 500 feet south of road on east side of drive in pumphouse.	F. Olson		Dom. & Irr.	281					X	X
9N/7E-26M1	County disposal site at northeast corner of Grant Line Rd. and White Rock Rd., near building on hill.	Sacramento County		Dom.	245						X
9N/7E-27P1	1.0 mile west of Grant Line Rd. on Old White Rock Rd., 20 feet south of road under windmill frame.	H. R. Calyer		Dom.	226	8				X	X
9N/7E-28B1	800 feet north of road to Line No. 4 on Nimbus Rd., east of road in pump plant.	Aerojet General Corporation	1951	Ind.	191	12	325		X		X
9N/7E-28K1	1.5 miles south of Nimbus, northeast of Nimbus Rd. and road to Line No. 4.	Aerojet General Corporation	1956	Ind.	197	12	335		X		X
9N/7E-28M1	Magazine area, south of main road and southwest of contractors area.	Aerojet General Corporation	1962	Test Well	185	8	100			X	X
9N/7E-29C1	1.6 miles east of Citrus Rd. and 0.5 mile southeast of Folsom Blvd. West Test Well.	Aerojet General Corporation	1962	Test Well	142	8	78		X	X	X
9N/7E-31G1	0.65 mile east of Fitzgerald Rd. on White Rock Rd., south of road and east of water tank.	T. P. Kirby		Dom.	134	6				X	
9N/7E-31M1	100 feet east of Fitzgerald Rd. and 80 feet south of White Rock Rd., north of barn by tank.	R. H. Davies	1951	Dom. & Irr.	124	12	250			X	
9N/7E-32B1	4.3 miles east of Mills on White Rock Rd., 100 feet south of road.	J. A. Rodgers		Dom.	175		130				X
9N/7E-32C1	1.6 miles east of Citrus Rd. on White Rock Rd., 900 feet northeast of entrance to Nitroplastizer Plant and 150 feet south of RR tracks.	Aerojet General Corporation	1958	Aband.	178	12	258		X	X	
9N/7E-32C2	1.6 miles east of Citrus Rd. on White Rock Rd., 200 feet north of Aerojet entrance gate.	Aerojet General Corporation	1958	Ind.	179	12	298		X	X	
9N/7E-32D1	1.6 miles east of Citrus Rd. on White Rock Rd., south of Nitroplastizer Plant, Stauffer Injection.	Aerojet General Corporation	1961	Ind.	150		1,560		X		
9N/7E-33E1	4.8 miles east of Mills on White Rock Rd., 500 feet south of road by dry feed plant	B. Petruci		Dom. & Irr.	175						X

a Domestic (Dom), Municipal (Mun), Irrigation (Irr), Industrial (Ind), and Livestock (Stk)
b U.S. Geological Survey datum (Feet above mean sea level unless otherwise indicated)

TABLE 9

MINERAL ANALYSIS OF GROUND WATER

FOLSOM—EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Mineral constituents in parts per million / equivalents per million

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total dissolved solids in ppm[b]	Per cent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Remarks
Mather No. 3	8N/6E- 2N1	6-21-62	68	121	7.4	9.9 0.49	4.0 0.33	8.4 0.37	1.9 0.05		56 0.92	1.6 0.03	4.2 0.12	4.0 0.06	2.8 0.15	0.0	59	Fe 0.02	124	30	41	0	
Mather No. 4	8N/6E- 2P1	6-21-62	68	113	7.9	9.0 0.45	4.3 0.35	6.8 0.30	2.0 0.05		61 1.00	0.0 0.00	3.0 0.08	2.9 0.05	0.2 0.01	0.0	61	Fe 0.00	119	26	40	0	
Citizens Suburban	8N/6E- 3B1	4-25-60			7.9	13 0.65	4.0 0.33	10 0.43	1.9 0.05		56 0.92	2.4 0.05	5.0 0.14	8.2 0.13	0.15 0.01			Fe 0.00	127		46	0	
		1-15-63		139	8.0	15 0.75	2.3 0.19	11 0.48	1.6 0.04		75 1.23	0.0 0.00	3.2 0.09	5.6 0.09	0.1 0.00	0.04	40	ABS 0.0; ClO_4 2	116	33	47	0	
J. Selinger	8N/6E- 3G1	10-13-58		513	7.9	12 0.58	4.0 0.31	9.0 0.40	1.5 0.04		61 1.00	1.0 0.03	7.0 0.20	6.0 0.10	0.2 0.01	0.16	33	Fe 0.01	244	30	44	0	
		5-21-59	69	140	7.8	16 0.80	0.5 0.04	11 0.48	1.5 0.04		70 1.15	2.3 0.05	2.2 0.06	6.9 0.11	0.1 0.00	0.16	35	NH_4 0.0; ClO_4 0	110	35	42	0	
		5-11-60	68	137	7.8	13 0.65	2.8 0.23	10 0.44	1.6 0.04		71 1.16	0.0 0.00	2.4 0.06	5.2 0.08	0.0 0.00	0.08	29	ClO_4 0	99	32	44	0	
Citizens Suburban Rockingham Well	8N/6E- 3H1	4-25-60			8.9	13 0.65	2.0 0.16	12 0.52	2.6 0.07		58 0.95	0.4 0.01	3.0 0.08	4.6 0.07	0.10 0.01			Fe 0.5	117		48	0	
R. E. Froom	8N/6E- 4A2	1-16-63	62	242	8.1	23 1.15	8.1 0.67	15 0.65	2.0 0.05		126 2.06	2.1 0.04	9.3 0.26	6.2 0.10	0.1 0.00	0.02	39	ABS 0.0; ClO_4 0	167	26	91	0	
C. Mehl	8N/6E- 4K1	12-18-61		297	7.1	23 1.15	16 1.35	11 0.48	1.4 0.04		129 2.11	13 0.27	8.7 0.24	26 0.42	0.0 0.00	0.06	56	ABS 0.0; Phenol 0.000	218	16	125	19	
		1-10-63	57	349	7.7	27 1.35	18 1.45	14 0.61	1.3 0.03		135 2.21	15 0.31	9.8 0.28	39 0.63	0.1 0.00	0.04	51	ABS 0.0; ClO_4 0	241	18	140	29	
J. Saiki	8N/6E- 5K2	6-12-55	64	336	8.2	33 1.65	15 1.27	14 0.61	1.7 0.04		174 2.85	15 0.31	7.8 0.22	16 0.26	0.1 0.01	0.00	54		243	17	146	3	
		9-19-58		397	8.2	34 1.69	19 1.60	16 0.72	1.5 0.04		182 2.98	24 0.50	10 0.27	20 0.32	0.0 0.00	0.04	38		294	17	164	0	
		1-16-63	50	295	8.2	24 1.20	15 1.24	12 0.52	1.3 0.03		112 1.84	20 0.42	8.3 0.23	29 0.47	0.1 0.00	0.05	49	ABS 0.0; ClO_4 1	214	17	122	30	
R. Coleman	8N/6E- 7P1	12-20-61	66	165	8.0	18 0.90	4.1 0.34	9.5 0.41	2.8 0.07		90 1.48	3.0 0.06	3.2 0.09	1.8 0.03	0.1 0.01	0.10	45	ABS 0.0; Phenol 0.000	132	24	62	0	
C. Scudder	8N/6E- 8E9	1-10-63	60	128	7.7	9.1 0.45	5.2 0.43	8.0 0.35	1.0 0.02		58 0.95	1.2 0.02	3.6 0.10	8.5 0.14	0.1 0.00	0.04	49	ABS 0.0; ClO_4 0	114	28	44	0	
W. Noble	8N/6E- 9P5	1- 4-62	65	120	7.9	8.8 0.44	4.9 0.40	8.8 0.38	0.9 0.02		55 0.90	1.0 0.02	4.5 0.13	9.7 0.16	0.1 0.01	0.1	45	ABS 0.0; Phenol 0.000	111	31	42	0	
		1-10-63	51	124	7.7	9.1 0.45	4.2 0.35	9.0 0.39	1.0 0.02		56 0.92	0.2 0.00	2.5 0.07	11 0.18	0.2 0.01	0.03	43	ABS 0.0; ClO_4 1	108	32	40	0	
Mather AFB No. 1	8N/6E-11C1	6-21-62	68	118	7.1	8.5 0.42	4.9 0.40	8.1 0.35	1.3 0.03		54 0.89	1.4 0.03	4.8 0.14	5.0 0.08	0.9 0.05	0.00	59	CO_2 6.8; Fe 0.00	121	29	41	0	

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol)

b Determined by addition of constituents

TABLE 9 (Cont.)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Well number	Date sampled	Temp. in °F	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total dissolved solids in ppm[b]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Remarks
						Mineral constituents in parts per million / equivalents per million																	
Mather AFB No. 2 500'	8N/6E-11Q2	6-21-62	68	119	7.7	9.6 / 0.48	4.3 / 0.35	7.6 / 0.33	1.8 / 0.05		62 / 1.02	0.2 / 0.0	3.2 / 0.09	4.4 / 0.07	0.2 / 0.01	0.0	59	CO_2 2.0; Fe 0.00	121	27	42	0	
Mather AFB AC&W	8N/6E-13B1	1- 8-62	68	111	7.7	8.4 / 0.42	3.9 / 0.32	8.5 / 0.37	0.6 / 0.02		46 / 0.75	1.0 / 0.02	4.8 / 0.14	9.9 / 0.16	0.3 / 0.02	0.0 / 0	55	ABS 0.0; Phenol 0.000	115	33	37	0	
		6-21-62		118	7.4	8.2 / 0.41	4.1 / 0.34	8.6 / 0.37	1.0 / 0.03		48 / 0.79	2.2 / 0.05	4.8 / 0.14	12 / 0.19	0.3 / 0.02	0.0	55	CO_2 3.0; Fe 0.00	120	32	37	0	
Mather AFB Wherry No.3 500'	8N/6E-13E1	1- 6-58		206	7.7	18 / 0.90	10 / 0.82	11 / 0.48	4.1 / 0.11		122 / 2.00	1.0 / 0.02	8.9 / 0.25	0.0 / 0.0	0.1 / 0.01	0.0	56	Fe 0.06; CO_2 3.9; Fe (Total) 1.6	169	21	86	0	
		6-21-62		198	7.8	17 / 0.85	8.3 / 0.68	11 / 0.48	3.5 / 0.09		114 / 1.87	0.8 / 0.02	8.2 / 0.23	3.0 / 0.05	0.2 / 0.01	0.0	64	CO_2 2.8; Fe 0.00	172	23	76	0	
Mather AFB Wherry No.1 500'	8N/6E-14J1	1- 6-58		164	8.1	14 / 0.70	6.2 / 0.51	14 / 0.61	3.0 / 0.08		100 / 1.64	1.0 / 0.02	7.0 / 0.20	0.2 / 0.00	0.3 / 0.01	0.04	59	Fe 0.07; CO_2 1.3; Fe (Total) 0.13	154	32	60	0	
		6-21-62	68	169	7.4	14 / 0.70	6.6 / 0.54	11 / 0.48	2.8 / 0.07		97 / 1.59	0.0 / 0.0	7.0 / 0.20	0.1 / 0.0	0.2 / 0.01	0.0	58	CO_2 6.1; Fe 0.01	148	27	62	0	
Mather AFB Wherry No.2 500'	8N/6E-14K1	1- 6-58		206	7.7	16 / 0.80	11 / 0.91	12 / 0.52	2.8 / 0.07		128 / 2.10	0.0 / 0.0	6.0 / 0.17	0.0 / 0.0	0.1 / 0.01	0.5	55	Fe (Dis) 0.04; Fe (Total) 4.2; CO_2 4.1	166	23	85	0	
		6-21-62	68	214	7.5	19 / 0.95	9.2 / 0.76	12 / 0.52	2.7 / 0.07		130 / 2.13	1.0 / 0.02	6.4 / 0.18	0.5 / 0.01	0.5 / 0.03	0.0	65	CO_2 6.5; Fe 0.01	180	23	85	0	
Mather AFB Wherry No.4	8N/6E-14R1	1- 6-58		156	8.1	12 / 0.60	7.8 / 0.64	11 / 0.48	2.6 / 0.07		90 / 1.48	1.9 / 0.04	6.6 / 0.19	3.2 / 0.05	0.1 / 0.01	0.01	66	Fe (Dis) 0.0; Fe (Total) 0.0; CO_2 1.2	155	27	62	0	
		6-21-62	68	153	7.7	14 / 0.70	4.7 / 0.39	9.8 / 0.43	2.4 / 0.06	-	83 / 1.36	0.0 / 0.0	7.2 / 0.20	1.7 / 0.03	0.2 / 0.01	0.0	60	CO_2 2.7; Fe 0.02	141	27	54	0	
Ted Kobota	8N/6E-16G3	1-14-63	67	130	7.7	10 / 0.50	3.2 / 0.26	11 / 0.48	1.0 / 0.02		57 / 0.93	0.5 / 0.01	3.7 / 0.10	13 / 0.21	0.1 / 0.00	0.03	34	ABS 0.0; ClO_4 0	104	38	38	0	
Mather AFB Sacramento Test Stand 80	8N/6E-16R2	1-10-62	64	181	8.0	15 / 0.75	7.7 / 0.63	11 / 0.48	1.0 / 0.03		86 / 1.41	3.0 / 0.06	9.0 / 0.25	6.1 / 0.10	0.1 / 0.01	0.1	43	ABS 0.0; Phenol 0.001	138	25	69	0	
W. Welander	8N/6E-17B1	1-10-63	48	114	7.9	8.5 / 0.42	4.1 / 0.34	8.0 / 0.35	0.9 / 0.02		56 / 0.92	0.0 / 0.00	3.1 / 0.09	4.8 / 0.08	0.2 / 0.01	0.01	49	ABS 0.0; ClO_4 1	107	31	38	0	
L. Slatter	8N/6E-17E5	1-10-63	57	117	7.7	7.7 / 0.38	4.1 / 0.34	10 / 0.44	1.0 / 0.02		58 / 0.95	1.2 / 0.02	3.9 / 0.11	4.3 / 0.07	0.2 / 0.01	0.03	43	ABS 0.0; ClO_4 4	103	37	36	0	
M. Owye 175-	8N/6E-17J3	12-28-61	65	179	8.0	20 / 1.00	2.9 / 0.24	14 / 0.61	1.7 / 0.04		103 / 1.69	0.0 / 0.0	4.2 / 0.12	1.2 / 0.02	0.1 / 0.01	0.1	31	ABS 0.0; Phenol 0.000	126	32	62	0	
Citizens Suburban 264'	8N/6E-18D1	1-11-56			7.9	26 / 1.27	6.1 / 0.50	9.9 / 0.42	4.1 / 0.11		142 / 1.86	0.6 / 0.01	6.8 / 0.19	1.2 / 0.17	0.1 / 0.01				194		91	0	
		4-19-60			8.1	24 / 1.20	6.1 / 0.50	11.0 / 0.47	3.6 / 0.09		121 / 1.94	0.7 / 0.02	6.0 / 0.17	0 / 0.0	0.1 / 0.01				161		85	0	

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol)

b Determined by addition of constituents

TABLE 9 (Cont.)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total dissolved solids in ppm[b]	Percent sodium	Hardness as $CaCO_3$: Total ppm	N.C. ppm	Remarks
Citizens Suburban	8N/6E-18F1	4-19-60			8.1	35 / 1.77	12.1 / 0.99	12.5 / 0.55	5.7 / 0.15		185 / 2.96	0.4 / 0.01	12.0 / 0.30	0 / 0.0	0.1 / 0.01				226		139	0	
W. T. Pierson	8N/6E-18N1	1-10-63	66	175	8.1	22 / 1.10	2.2 / 0.18	11 / 0.48	2.8 / 0.07		100 / 1.64	0.8 / 0.02	4.2 / 0.12	1.7 / 0.03	0.0 / 0.00	0.04	40	ABS 0.0; ClO_4 0	134	26	64	0	
Sam Kono	8N/6E-19B4	1-10-63	67	176	8.2	18 / 0.90	5.1 / 0.42	10 / 0.44	2.6 / 0.07		102 / 1.67	0.0 / 0.00	4.8 / 0.14	0.6 / 0.01	0.1 / 0.00	0.02	43	ABS 0.0; ClO_4 1	134	24	66	0	
P. Takehara	8N/6E-21M2	12-19-61		162	7.7	17 / 0.85	4.2 / 0.35	9.9 / 0.43	2.0 / 0.05		90 / 1.48	1.2 / 0.02	4.3 / 0.12	2.3 / 0.04	0.0 / 0.00	0.04	58	ABS 0.0 Phenol 0.000	143	26	60	0	
F. Umeda	8N/6E-21N1	8-12-55	66	161	7.5	14 / 0.70	5.8 / 0.48	9.5 / 0.41	1.5 / 0.04		82 / 1.34	2.4 / 0.05	5.8 / 0.16	4.7 / 0.08	0.1 / 0.01	0.00	61		145	25	59	0	
		7-24-59		156	8.0	13 / 0.65	6.2 / 0.51	9.7 / 0.42	2.8 / 0.07		82 / 1.34	1.0 / 0.02	5.5 / 0.16	3.2 / 0.05	0.3 / 0.02	0.0	63		145	25	58	0	
		9-12-61	67	157	7.9	15 / 0.75	4.5 / 0.37	9.2 / 0.40	1.6 / 0.04		80 / 1.31	1.3 / 0.03	4.6 / 0.13	4.0 / 0.06	0.2 / 0.01	0.04	64		143	26	56	0	
Nivieson	8N/6E-22R1	12-19-61	65	185	7.7	14 / 0.70	5.6 / 0.46	16 / 0.70	1.6 / 0.04		94 / 1.54	1.8 / 0.04	5.8 / 0.16	8.5 / 0.14	0.2 / 0.01	0.04	64	ABS 0.0 Phenol 0.000	164	37	58	0	
Reedy	8N/6E-25J1	12-19-61	65	164	7.4	11 / 0.55	6.4 / 0.53	12 / 0.52	0.7 / 0.02		73 / 1.20	0.8 / 0.02	11 / 0.31	3.0 / 0.05	0.4 / 0.02	0.03	69	ABS 0.0 Phenol 0.000	150	32	54	0	
Harry	8N/6E-26H2	12-19-61		233	7.9	13 / 0.65	7.2 / 0.59	24 / 1.04	0.9 / 0.02		89 / 1.46	4.0 / 0.08	16 / 0.45	12 / 0.19	0.2 / 0.01	0.00	66	ABS 0.0 Phenol 0.000	187	45	62	0	
Craig 175'	8N/6E-27Q2	12-19-61	64	168	7.8	15 / 0.75	5.0 / 0.41	13 / 0.56	2.5 / 0.06		96 / 1.57	1.6 / 0.03	4.8 / 0.14	0.1 / 0.0	0.1 / 0.0	0.02	54	ABS 0.0 Phenol 0.000	143	31	58	0	
Koenig	8N/6E-27H2	1- 9-63	67	166	7.9	14 / 0.70	4.6 / 0.38	13 / 0.56	2.4 / 0.06		93 / 1.52	2.1 / 0.04	5.6 / 0.16	0.6 / 0.01	0.1 / 0.00	0.02	52	ABS 0.0	140	33	54	0	
F. Souza	8N/6E-28E1	1- 9-63	49	174	7.9	14 / 0.70	6.8 / 0.56	11 / 0.48	1.7 / 0.04		92 / 1.51	0.6 / 0.01	6.0 / 0.17	4.8 / 0.08	0.1 / 0.00	0.04	60	ABS 0.0; ClO_4 1	150	27	63	0	
C. Meyers	8N/6E-28L1	1- 9-63	49	181	7.9	11 / 0.55	6.2 / 0.51	19 / 0.83	1.4 / 0.04		104 / 1.70	0.5 / 0.01	5.8 / 0.16	1.9 / 0.03	0.1 / 0.00	0.04	49	ABS 0.0; ClO_4 0	146	43	53	0	
Lee Cook	8N/6E-29F1	1- 3-62		183	8.0	14 / 0.70	7.3 / 0.60	14 / 0.61	2.5 / 0.06		107 / 1.75	1.0 / 0.02	4.5 / 0.13	0.2 / 0.0	0.2 / 0.01	0.1	62	ABS 0.0 Phenol 0.001	159	31	65	0	
W. Franklin	8N/6E-29P2	1- 9-63	51	174	8.0	14 / 0.70	7.0 / 0.58	11 / 0.48	1.2 / 0.03		91 / 1.49	0.5 / 0.01	6.6 / 0.19	4.6 / 0.07	0.1 / 0.00	0.04	56	ABS 0.0; ClO_4 1	146	27	64	0	
Manlove Sewage Plant	8N/6E-30C1	1- 4-62	66	159	8.0	16 / 0.80	5.1 / 0.42	9.7 / 0.42	2.2 / 0.06		88 / 1.44	0.0 / 0.00	7.0 / 0.20	1.4 / 0.02	0.1 / 0.01	0.0	61	ABS 0.0 Phenol 0.000	146	25	61	0	
Dick Harry	8N/6E-33B1	1- 4-62		173	8.2	11 / 0.55	5.2 / 0.43	19 / 0.83	1.4 / 0.04		93 / 1.52	0.0 / 0.00	8.2 / 0.23	1.6 / 0.03	0.1 / 0.01	0.1	62	ABS 0.0 Phenol 0.000	155	45	49	0	
Dutra Depth 300'	8N/6E-34R1	1- 4-62	69	179	8.1	12 / 0.60	6.6 / 0.54	16 / 0.70	1.6 / 0.04		87 / 1.43	1.0 / 0.02	13 / 0.37	0.5 / 0.01	0.2 / 0.01	0.1	55	ABS 0.0 Phenol 0.001	149	37	57	0	

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol)

b Determined by addition of constituents

TABLE 9 (Cont.)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Mineral constituents in parts per million / equivalents per million

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total dissolved solids in ppm[b]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Remarks
John Tracy	8N/7E-2N1	7-13-58	70	218	6.8	11 / 0.55	6.4 / 0.53	22 / 0.96	1.8 / 0.05		92 / 1.51	4.1 / 0.08	14 / 0.39	1.4 / 0.02	0.4 / 0.02	0.08	73	NH_4 0.0; ClO_4 0	180	46	54	0	
		5-21-59	70	225	8.0	15 / 0.75	4.2 / 0.35	22 / 0.96	1.7 / 0.04		93 / 1.52	7.4 / 0.15	14 / 0.39	3.1 / 0.05	0.3 / 0.02	0.00	78	NH_4 0.0; ClO_4 0	192	46	55	0	
		5-11-60	69	221	7.5	13 / 0.65	5.7 / 0.47	21 / 0.91	1.5 / 0.04		92 / 1.51	6.9 / 0.14	14 / 0.39	4.4 / 0.07	0.3 / 0.02	0.21	77	ClO_4 0; NH_4 0.0	189	44	56	0	
Douglas Air 175'	8N/7E-4F1	12-26-61		202	7.7	15 / 0.75	9.6 / 0.79	14 / 0.61	1.4 / 0.04		117 / 1.92	5.0 / 0.10	3.8 / 0.11	0.2 / 0.00	0.3 / 0.02	0.1	45	ABS 0.0; Phenol 0.002	152	28	77	0	
Douglas Air 200+	8N/7E-9K1	12-26-61	68	174	7.3	13 / 0.65	6.7 / 0.55	14 / 0.61	1.4 / 0.04		100 / 1.64	1.0 / 0.02	4.2 / 0.12	0.6 / 0.01	0.3 / 0.22	0.1	58	ABS 0.0; Phenol 0.000	148	33	60	0	
F. O'Hanneson	8N/7E-9N1	1- 9-63	50	104	7.3	6.2 / 0.31	2.6 / 0.21	11 / 0.48	0.8 / 0.02		55 / 0.90	1.2 / 0.02	3.0 / 0.08	0.0 / 0.00	0.2 / 0.01	0.02	40	ABS 0.0; ClO_4 0	92	47	26	0	
	8N/7E-12N1	1- 4-62	66	171	7.9	10 / 0.50	4.9 / 0.40	18 / 0.78	1.4 / 0.04		67 / 1.10	14 / 0.29	7.8 / 0.22	2.4 / 0.04	0.3 / 0.02	0.0	84	ABS 0.0; Phenol 0.000	176	45	45	0	
Russel Brothers	8N/7E-14C1	1-11-63	66	144	7.8	7.7 / 0.38	4.9 / 0.40	14 / 0.61	1.1 / 0.03		62 / 1.02	3.0 / 0.06	7.6 / 0.21	4.4 / 0.07	0.3 / 0.02	0.03	69	ABS 0.0; ClO_4 1	142	43	39	0	
Mather AFB Golf Course No.1	8N/7E-18E1	6-21-62	68	161	7.2	12 / 0.60	7.2 / 0.59	11 / 0.48	2.4 / 0.06		98 / 1.61	0.4 / 0.01	4.5 / 0.13	0.0 / 0.00	0.1 / 0.01	0.0	60	CO_2 9.8; Fe (dis.) 0.01; Fe (total) 0.02	146	28	60	0	
Mather AFB Golf Course No.2	8N/7E-18F1	6-21-62	68	165	7.3	13 / 0.65	6.9 / 0.57	11 / 0.48	2.4 / 0.06		99 / 1.62	0.2 / 0.00	4.8 / 0.14	1.6 / 0.03	0.2 / 0.01	0.0	60	CO_2 7.9; Fe (dis.) 0.01; Fe (total) 0.05	149	27	61	0	
Mather AFB Bac Ord Well	8N/7D-19D1	6-21-62	68	173	8.0	12 / 0.60	5.5 / 0.45	16 / 0.70	1.8 / 0.05		100 / 1.64	0.0 / 0.00	6.7 / 0.19	0.8 / 0.01	0.3 / 0.02	0.0	58	CO_2 1.6; Fe (dis.) 0.00; Fe (total) 0.00	150	39	52	0	
Tudesko	8N/7E-26Q2	1- 3-62	68	237	8.0	19 / 0.95	13 / 1.05	12 / 0.52	1.8 / 0.05		122 / 2.00	9.0 / 0.19	9.8 / 0.28	1.5 / 0.02	0.2 / 0.01	0.1	67	ABS 0.0; Phenol 0.000	193	20	100	0	
Sacramento Rendering Plant	8N/7E-30A1	1- 9-63	65	178	7.8	11 / 0.55	6.0 / 0.49	16 / 0.70	2.5 / 0.06		90 / 1.48	1.6 / 0.03	6.2 / 0.17	2.6 / 0.04	0.2 / 0.01	0.08	73	ABS 0.0; ClO_4 1	163	39	52	0	
Carli	8N/7E-31M1	1- 4-62	67	170	7.8	11 / 0.55	6.4 / 0.53	15 / 0.65	1.5 / 0.04		81 / 1.33	2.0 / 0.04	11 / 0.31	1.4 / 0.02	0.3 / 0.02	0.1	68	ABS 0.0; Phenol 0.000	157	37	54	0	
Wade Bryant	8N/7E-33N1	12-26-61	66	146	7.6	9.2 / 0.46	5.1 / 0.42	13 / 0.57	0.6 / 0.02		71 / 1.16	1.0 / 0.02	6.2 / 0.17	2.5 / 0.04	0.2 / 0.01	0.1	81	ABS 0.0; Phenol 0.001	154	39	44	0	
Sacramento County Boys Ranch	8N/8E-18K	1- 3-62	70	175	7.7	13 / 0.65	8.4 / 0.69	10 / 0.44	0.3 / 0.01		64 / 1.05	17 / 0.35	8.5 / 0.24	5.0 / 0.08	0.2 / 0.01	0.0	50	ABS 0.0; Phenol 0.000	144	25	67	15	
Ed Pilliken	8N/8E-29K1	8-25-61		197	7.7	13 / 0.65	5.2 / 0.43	15 / 0.65	1.0 / 0.02		41 / 0.67	34 / 0.71	14 / 0.39	0.4 / 0.01	0.3 / 0.02	0.08	64		167	37	54	20	
Wilson	8N/8E-30D	1- 3-62	64	382	8.0	34 / 1.70	19 / 1.58	19 / 0.83	7.3 / 0.19		230 / 3.77	7.0 / 0.15	8.8 / 0.25	0.2 / 0.00	0.0 / 0.0	0.1	55	ABS 0.0; Phenol 0.001	263	19	164	0	
Tenant: Harris	9N/6E-13Q1	12-20-61	54	415	8.1	38 / 1.90	25 / 2.04	12 / 0.52	1.6 / 0.04		201 / 3.29	28 / 0.58	8.8 / 0.25	15 / 0.24	0.1 / 0.01	0.1	58	ABS 0.0; Phenol 0.000	286	12	197	32	

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol).

b Determined by addition of constituents.

TABLE 9 (Cont.)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Well number	Date sampled	Temp. in °F	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total dissolved solids in ppm[b]	Percent sodium	Hardness as $CaCO_3$: Total ppm	N.C. ppm	Remarks
J. W. Lovery	9N/6E-23Q2	12-18-61		326	7.2	23/1.15	17/1.41	12/0.52	1.6/0.04		121/1.98	16/0.33	20/0.56	14/0.22	0.2/0.01	0.07	57	ABS 0.0 Phenol 0.000	220	17	128	29	
Finer Homes, Inc. Mobile Country Club	9N/6E-24J1	8-15-62			7.6	19.8/0.99	10.1/0.81	16.0/0.69	1.9/0.05		132/2.11	9.4/0.20	4.6/0.11	4.4/0.07	0.05/0.03				179		91		
		1-14-63	64	222	8.2	20/1.00	8.3/0.68	14/0.61	1.7/0.04		123/2.02	7.1/0.15	4.3/0.12	3.5/0.06	0.1/0.00	0.02	46	ABS 0.0; ClO_4 2	165	26	84	0	
Beach	9N/6E-24M2	12-18-61		327	7.5	29/1.45	15/1.21	15/0.65	2.8/0.07		175/2.87	14/0.29	4.8/0.14	6.7/0.11	0.1/0.0	0.07	43	ABS 0.0 Phenol 0.000	216	19	133	0	
Natomas No. 11	9N/6E-25D1	1-14-63	66	248	8.1	24/1.20	10/0.84	12/0.52	3.0/0.08		133/2.18	8.4/0.17	5.0/0.14	5.6/0.09	0.1/0.00	0.03	50	ABS 0.0; ClO_4 1	183	20	102	0	
Edwards Motel	9N/6E-25H1	3-23-55		181	7.5	15/0.75	7.3/0.60	9.8/0.43	1.3/0.03		94/1.54	4.3/0.09	4.0/0.11	2.1/0.03		0.16		NH_4 0.5; ClO_4 0 NO_2 0.01		23	68	0	
		7-26-55	70	182									3.3/0.09	1.8/0.03				NH_4 1.6; NO_2 0.00; ClO_4 1					
		5-21-56	69	186	7.8	17/0.85	11/0.87	11/0.48	1.3/0.03		105/1.72	18/0.38	4.0/0.11	1.7/0.03	0.8/0.04	0.16	59	NH_4 0.0	176	21	86	0	
		9-16-57	68	182	7.4	16/0.80	6.8/0.56	11/0.48	1.5/0.04		94/1.54	8.6/0.18	3.8/0.11	2.1/0.03	0.1/0.01	0.03	52	NH_4 0.0 ClO_4 1	149	26	68	0	
		7-14-58	67	178	7.2	15/0.75	7.2/0.59	9.6/0.42	0.7/0.02		93/1.52	4.8/0.10	3.5/0.10	1.0/0.02	0.1/0.0	0.01	45	NH_4 0.0 ClO_4 0	133	24	67	0	
		5-21-59		178	7.7	18/0.90	5.1/0.42	10/0.44	1.2/0.03		92/1.51	7.2/0.15	2.8/0.08	2.8/0.04	0.2/0.01	0.02	49	NH_4 0.0 ClO_4 0	141	24	66	0	
		7- 9-59		168														NH_4 0.1 ClO_4 0.8					
		5-11-60	66	170	7.8	15/0.75	6.2/0.51	9.0/0.39	1.2/0.03		87/1.42	2.5/0.05	3.9/0.11	1.7/0.03	0.2/0.01	0.07	50	ClO_4 0	133	23	63	0	
Valkea Burg & Co.	9N/6E-25P1	1- 9-63	49	216	7.5	15/0.75	12/1.01	10/0.44	1.2/0.03		124/2.03	4.8/0.10	4.1/0.12	0.8/0.01	0.1/0.00	0.00	47	ABS 0.0; ClO_4 0	156	20	88	0	
Inter. Ass. of Machinest	9N/6E-25R1	1- 9-63	65	246	7.9	19/0.95	13/1.07	12/0.52	1.6/0.04		138/2.26	8.9/0.18	4.6/0.13	1.2/0.02	0.1/0.00	0.01	51	ABS 0.0; ClO_4 0	179	20	101	0	
Natomas No. 9	9N/6E-26J1	1-14-63	67	244	8.2	23/1.15	9.6/0.79	12/0.52	3.8/0.10		129/2.11	2.5/0.05	6.7/0.19	9.0/0.14	0.1/0.00	0.04	57	ABS 0.0; ClO_4 1	187	20	97	0	
Natomas No. 10	9N/6E-26L1	1-14-63	66	260	8.1	24/1.20	11/0.88	12/0.52	5.0/0.13		138/2.26	3.1/0.06	10/0.28	4.3/0.07	0.1/0.00	0.04	57	ABS 0.0; ClO_4 1	194	19	104	0	
Rancho Cordova Sewage Plant	9N/6E-27L1	7-14-58	66	246	7.2	24/1.20	7.5/0.62	15/0.65	2.2/0.06		128/2.10	5.8/0.12	7.1/0.20	2.2/0.04	0.1/0.00	0.1	35	NH_4 0.0 ClO_4 0	162	26	91	0	
		5-21-59		247	7.8	27/1.35	5.5/0.45	15/0.65	2.0/0.05		128/2.10	5.3/0.11	6.6/0.19	4.3/0.07	0.1/0.00	0.01	40	NH_4 0.0 ClO_4 0	169	26	90	0	

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol).

b Determined by addition of constituents

TABLE 9 (Cont.)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total dissolved solids in ppm[b]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Remarks
						Mineral constituents in parts per million / equivalents per million																	
Rancho Cordova Sewage Plant	9N/6E-27L1	5-11-60	66	238	8.1	25/1.25	6.7/0.55	14/0.61	1.8/0.05		126/2.06	3.8/0.08	7.8/0.22	2.7/0.04	0.1/0.00	0.08	41	NH_4 0.0; ClO_4 0	165	25	90	0	
Natomas No. 6	9N/6E-27R1	12-17-56			8.3	27/1.35	12.3/1.01	12.4/0.53	1.5/0.04		110/2.14	5.1/0.11	7.0/0.20	2.7/0.19	0.0/0.00				211		118		
		1-14-63	64	291	8.3	28/1.40	12/1.02	14/0.61	1.8/0.05		147/2.41	5.3/0.11	9.2/0.26	14/0.22	0.2/0.01	0.01	49	ABS 0.0; ClO_4 2	206	20	121	1	
Natomas No. 3	9N/6E-34G1	10-9-56			8.3	28.1/1.41	10.6/0.87	12.4/0.53	1.7/0.04		144/2.30	5.4/0.11	8.1/0.23	2.0/0.14	0.0/0.00				219		114		
		1-14-63	64	302	8.3	33/1.65	9.6/0.79	15/0.65	2.0/0.05		152/2.49	8.2/0.17	9.4/0.26	11/0.18	0.1/0.00	0.03	42	ABS 0.0; ClO_4 1	205	21	122	0	
Citizens Suburban Cordova Meadows #1	9N/6E-34M2	10-9-58			8.3	23/1.13	9.5/0.78	12/0.52	1.7/0.04		123/1.97	7.0/0.15	6.9/0.19	0.9/0.06	0.1/0.01			Fe (total) 0.10	187		96		
Virgil Parrick	9N/6E-34R2	12-20-61	66	238	7.7	19/0.95	11/0.93	11/0.48	1.1/0.03		91/1.49	13/0.27	16/0.45	4.7/0.08	0.2/0.01	0.1	49	ABS 0.0; Phenol 0.000	170	20	94	19	
Natomas No. 1	9N/6E-35C2	8-4-54			7.6	24.8/1.24	9.6/0.79	13/0.56	1.5/0.04		139/2.22	1.6/0.03	9.5/0.27	7.0/0.11	0/0.00			Fe (total) 0.02	206		107		
Natomas No. 2	9N/6E-35C3	8-4-54			8.2	20/1.00	8.3/0.68	19/0.82	0/0.00		134/2.14	2.5/0.05	3.0/0.08	0/0.00	0.4/0.01			Fe (total) 0.80	187		84		
Natomas No. 5	9N/6E-35M1	12-17-56			8.1	14.6/0.73	5.0/0.41	9.5/0.41	2.1/0.05		79/1.27	4.1/0.09	3.0/0.08	0.52/0.04	0/0.00			Fe (total) 0.04	120		57		
Aero D	9N/6E-36J1	1-9-63	60	189	7.7	15/0.75	7.9/0.65	11/0.48	1.3/0.03		86/1.41	4.3/0.09	6.0/0.17	17/0.27	0.2/0.01	0.05	58	ABS 0.0; ClO_4 0	163	25	70	0	
McDuffee	9N/6E-36K1	12-20-61	66	224	7.8	17/0.85	12/0.95	10/0.44	1.4/0.04		110/1.80	5.0/0.10	5.2/0.15	10/0.16	0.3/0.02	0.1	56	ABS 0.0; Phenol 0.000	171	19	90	0	
Mabel Brown	9N/7E-12Q1	12-20-61	67	117	7.9	9.2/0.46	3.4/0.28	10/0.44	0.6/0.02		63/1.03	3.0/0.06	3.0/0.08	0.2/0.00	0.4/0.02	0.1	84	ABS 0.0; Phenol 0.000	145	37	37	0	
Nettie Rodgers	9N/7E-15M3	11-12-53	63	332	7.1	27/1.35	18/1.48	12/0.52	1.6/0.04		169/2.77	6.3/0.13	16/0.45	2.9/0.05	0.0/0.00	0.01	52		219	15	141	3	
		11-4-55	67	360	8.4	30/1.50	21/1.72	14/0.61	1.5/0.04		172/2.82	8.4/0.18	18/0.51	12/0.19	0.0/0.00	0.00	53		246	16	161	15	
		7-11-57	76	349	6.2	30/1.50	20/1.66	12/0.52	1.2/0.03		169/2.77	9.9/0.21	18/0.51	8.8/0.14	0.1/0.01	0.04	44		227	14	158		
		9-16-57	64	364	6.9	28/1.40	21/1.74	14/0.61	1.7/0.04		171/2.80	7.7/0.16	19/0.54	12/0.19	0.0/0.00	0.00	54	NH_4 0.4; ClO_4 1.0	243	16	157	17	
		7-13-58		472	6.9	34/1.70	27/2.26	14/0.61	1.2/0.03		147/2.41	33/0.69	27/0.76	48/0.77	0.2/0.01	0.00	46	NH_4 0.0; ClO_4 0	302	13	198	78	
		5-21-59	65	346	8.2	32/1.60	16/1.30	12/0.52	1.2/0.03		164/2.69	8.4/0.17	17/0.48	6.7/0.11	0.1/0.00	0.04	53	NH_4 0.0; ClO_4 0	227	15	145	11	

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol)

b Determined by addition of constituents.

TABLE 9 (Cont.)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total[b] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	N.C. ppm	Remarks
Nettie Rodgers	9N/7E-15M3	5-11-60	66	316	7.3	24 / 1.20	19 / 1.58	12 / 0.52	1.0 / 0.02		158 / 2.59	6.1 / 0.13	16 / 0.45	2.8 / 0.04	0.1 / 0.00	0.08	51	ClO_4 0	210	16	139	9	
USBR	9N/7E-16G1	2-26-58		477	7.6	50 / 2.50	22 / 1.78	14 / 0.61	3.3 / 0.08		210 / 3.44	17 / 0.35	40 / 1.13	0.4 / 0.01	0.0 / 0.00	0.00	58		308	12	214	42	
		6-18-58		458	8.4	50 / 2.50	21 / 1.74	13 / 0.57	3.1 / 0.08		191 / 3.13	17 / 0.35	40 / 1.13	2.2 / 0.04	0.0 / 0.00	0.1	21		267	12	212	46	
		7- 7-61		393	8.2			14 / 0.61					24 / 0.68	2.6 / 0.04									
Tenant: Carlin	9N/7E-16H1	11-12-53	66	399	8.1	37 / 1.85	20 / 1.64	14 / 0.61	3.3 / 0.08		185 / 3.03	35 / 0.73	12 / 0.34	1.3 / 0.02	0.0 / 0.00	0.05	60		274	15	175	23	
William Clarkson	9N/7E-16J1	2-26-58		400	7.2	36 / 1.80	24 / 2.00	15 / 0.65	2.3 / 0.06		208 / 3.41	27 / 0.56	13 / 0.37	0.5 / 0.01	0.0 / 0.00	0.00	64		284	14	190	19	
		6-18-58		391	7.8	34 / 1.70	21 / 1.75	16 / 0.70	2.4 / 0.06		203 / 3.33	21 / 0.44	12 / 0.34	2.3 / 0.04	0.0 / 0.00	0.00	65		274	17	172	6	
Howard Greenhalgh	9N/7E-16K1	11-12-53	63	257	7.6	23 / 1.15	13 / 1.07	7.6 / 0.33	1.8 / 0.05		108 / 1.77	2.6 / 0.05	24 / 0.68	1.8 / 0.03	0.1 / 0.01	0.03	46		173	13	111	22	
Natomas Dredging Company	9N/7E-16P1	11-12-53	64	349	8.1	35 / 1.75	18 / 1.48	12 / 0.52	2.0 / 0.05		198 / 3.24	13 / 0.27	6.5 / 0.18	1.8 / 0.03	0.0 / 0.00	0.03	46		232	14	161	0	
		2-26-58		99	7.0	7.6 / 0.38	5.4 / 0.44	4.7 / 0.20	0.7 / 0.02		47 / 0.77	9.6 / 0.20	3.0 / 0.08	0.0 / 0.00	0.0 / 0.00	0.00	30		84	19	41	2	
		6-18-58		278	7.3	23 / 1.15	16 / 1.29	9.0 / 0.39	1.3 / 0.03		133 / 2.18	9.6 / 0.20	16 / 0.45	2.5 / 0.04	0.0 / 0.00	0.00	34		177	14	122	3	
		7- 7-61		94	7.4			5.1 / 0.22					3.0 / 0.08	0.7 / 0.01									
Jet Cafe	9N/7E-16P2	2-26-58		336	7.2	34 / 1.70	16 / 1.30	12 / 0.52	2.2 / 0.06		172 / 2.82	18 / 0.37	8.4 / 0.24	6.4 / 0.10	0.0 / 0.00	0.00	40		222	15	150	9	
		6-18-58		345	7.3	31 / 1.55	14 / 1.13	16 / 0.70	2.1 / 0.05		119 / 1.95	32 / 0.67	14 / 0.39	29 / 0.47	0.0 / 0.00	0.10	36		233	20	134	36	
		7- 7-61		182	8.4			13 / 0.57					7.0 / 0.20	10 / 0.16									
Libby, McNeill and Libby Co.	9N/7E-16Q1	8-27-52		399	7.2	40 / 2.00	21 / 1.73	14 / 0.61	2.0 / 0.05		218 / 3.57	14 / 0.29	16 / 0.45	2.0 / 0.03	0.0 / 0.00	0.01	53		269	14	186	8	
		11-12-53	64	490	8.0	48 / 2.40	25 / 2.06	14 / 0.61	2.1 / 0.05		221 / 3.62	14 / 0.29	40 / 1.13	2.7 / 0.04	0.0 / 0.00	0.04	54		309	12	223	42	
		3-23-55		646	7.8	59 / 2.94	34 / 2.76	18 / 0.78	2.5 / 0.06		232 / 3.80	3.3 / 0.07	82 / 2.31	4.8 / 0.08		0.05		NH_4 0.7; NO_2 0.01; ClO_4 0		12	285	95	
		7-26-55	64	466									32 / 0.90	6.0 / 0.10				NH_4 1.4; NO_2 0.00; ClO_4 0					

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol)

b Determined by addition of constituents.

TABLE 9 (Cont)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Mineral constituents in parts per million / equivalents per million

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total dissolved solids in ppm[b]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Remarks
Libby, McNeill and Libby Co.	9N/7E-16Q1	11-4-55	62	523	8.5	53 2.64	26 2.12	18 0.78	2.3 0.06		210 3.44	14 0.29	52 1.47	5.2 0.08	0.0 0.00	0.06	56	NH_4 0.2; ClO_4 2	338	14	238	53	
		8-30-56	66	403				14 0.61					19 0.54			0.00					189		
		9-16-57	64	476	8.0	43 2.15	23 1.89	18 0.78	2.5 0.06		210 3.44	12 0.25	40 1.13	5.4 0.09	0.0 0.00	0.0	55	NH_4 0.0 ClO_4 1	303	16	202	30	
		2-26-58		658	8.1	59 2.94	32 2.66	27 1.17	2.7 0.07		239 3.92	17 0.35	87 2.45	5.0 0.08	0.0 0.00	0.00	57		405	17	280	84	
		7-14-58		404	7.2	37 1.85	20 1.65	16 0.70	2.2 0.06		208 3.41	13 0.27	15 0.42	3.2 0.05	0.2 0.01	0.01	45	NH_4 0.0 ClO_4 0	254	16	175	5	
		5-21-59	70	416	7.8	45 2.24	18 1.46	13 0.56	2.2 0.06		209 3.42	13 0.27	19 0.54	2.5 0.04	0.1 0.00	0.02	56	NH_4 0.0 ClO_4 0	272	13	185	14	
		5-11-60	69	372	8.5	38 1.90	20 1.68	11 0.48	2.0 0.05		190 3.11	9.0 0.19	12 0.34	1.6 0.02	0.1 0.00	0.05	55	ClO_4 0	252	12	179	7	
		7-7-61		377	8.4			15 0.65					16 0.45	3.2 0.05									
	9N/7E-16Q2	2-26-58		380	7.1	34 1.70	21 1.74	15 0.65	2.2 0.06		195 3.20	17 0.35	17 0.48	3.1 0.05	0.0 0.00	0.00	60		265	16	172	12	
		6-18-58		381	8.3	34 1.70	20 1.66	19 0.83	2.3 0.06		188 3.08	20 0.42	19 0.54	3.8 0.06	0.1 0.01	0.1	60		275	20	168	7	
		7-7-61		377	8.4			15 0.65					16 0.45	3.5 0.06									
Pac. Cem. & Agg.	9N/7E-18M1	1-10-63	61	208	8.0	22 1.10	8.5 0.70	6.8 0.30	2.3 0.06		110 1.80	9.4 0.20	3.5 0.10	1.4 0.02	0.1 0.00	0.03	42	ABS 0.0; ClO_4 1	150	14	90	0	
Air Products, Inc.	9N/7E-21D1	2-26-58		316	7.7	30 1.50	15 1.22	14 0.61	5.3 0.14		166 2.72	19 0.40	9.6 0.27	0.0 0.00	0.00 0.00	0.00	65		240	18	136	0	
		6-18-58		313	7.7	24 1.20	16 1.32	13 0.57	5.0 0.13		160 2.62	12 0.25	11 0.31	1.8 0.03	0.0 0.00	0.00	62		224	18	126	0	
		7-14-58		320	7.6	30 1.50	14 1.12	12 0.52	4.0 0.10		166 2.72	18 0.37	3.0 0.08	0.8 0.01	0.2 0.01	0.02	60	NH_4 0.0 ClO_4 0	224	16	131	0	
		5-21-59		331	7.2	34 1.70	11 0.92	14 0.61	5.0 0.13		167 2.74	13 0.27	10 0.28	2.4 0.04	0.1 0.00	0.05	61	NH_4 0.0 ClO_4 0	232	18	131	0	
		5-11-60		314	8.6	32 1.60	13 1.06	11 0.48	5.1 0.13		154 2.47	12 0.25	10 0.28	1.1 0.02	0.1 0.00	0.05	61	ClO_4 0	226	15	133	0	
		8-24-61		328	7.2	31 1.55	13 1.05	13 0.56	4.8 0.12		164 2.69	12 0.25	9.9 0.28	2.2 0.04	0.2 0.01	0.03	65		232	17	130	0	
		8-10-62		326	8.2	31 1.55	13 1.07	14 0.61	4.8 0.12		162 2.66	13 0.27	10 0.28	2.7 0.04	0.1 0.00	0.04	55	ClO_4 0	224	18	131	0	

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol)

b Determined by addition of constituents.

TABLE 9 (Cont)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total[b] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Remarks
						Mineral constituents in parts per million / equivalents per million																	
Aerojet Test Thief	9N/7E-23L1	9-12-62	66	541	6.6	48 / 2.40	35 / 2.89	16 / 0.70	1.1 / 0.03		318 / 5.21	19 / 0.40	10 / 0.28	0.0 / 0.00	0.1 / 0.00	0.01	47		332	12	265	4	
Aerojet Test M.P.U.	9N/7E-23L1	9-12-62	66	509	7.4	48 / 2.40	32 / 2.60	15 / 0.65	0.9 / 0.02		306 / 5.02	18 / 0.37	8.7 / 0.24	0.4 / 0.01	0.4 / 0.02	0.01	44		317	11	250	0	
Aerojet Thief	9N/7E-24H1	9-12-62		412	7.2	26 / 1.30	15 / 1.22	41 / 1.78	1.5 / 0.04		222 / 3.64	7.7 / 0.16	16 / 0.45	0.6 / 0.01	0.7 / 0.04	0.14	18		236	41	126	0	
Aerojet M.P.U.	9N/7E-24H1	9-12-62		394	7.4	24 / 1.20	13 / 1.10	43 / 1.87	1.3 / 0.03		210 / 3.44	8.7 / 0.18	16 / 0.45	4.5 / 0.07	0.8 / 0.04	0.10	29		243	44	115	0	
Capital Dredging	9N/7E-26H1	11-12-53	68	115	7.7	8.9 / 0.44	3.9 / 0.32	7.4 / 0.32	1.0 / 0.03		43 / 0.70	4.9 / 0.10	5.0 / 0.14	8.9 / 0.14	0.1 / 0.00	0.00	60		121	29	38	3	
		3-23-55		115	7.5	8.9 / 0.44	3.8 / 0.32	6.5 / 0.28	0.7 / 0.02		39 / 0.64	7.2 / 0.15	5.0 / 0.14	8.6 / 0.14		0.22		NH_4 0.6; NO_2 0.0; ClO_4 0		26	38	6	
		7-26-55	69	121									4.6 / 0.13	8.9 / 0.14				NH_4 1.5; NO_2 0.01; ClO_4 0					
		11- 4-55	62	123				6.0 / 0.26					4 / 0.11								43		
		5-21-56	63	112	7.2	9.6 / 0.48	3.7 / 0.30	7.5 / 0.33	0.8 / 0.02		46 / 0.75	1.0 / 0.02	5.0 / 0.14	8.9 / 0.14	1.0 / 0.05	0.16	66	NH_4 0.0	126	29	39	1	
		9-16-57	68	119	6.6	8.8 / 0.44	3.8 / 0.31	8.0 / 0.35	1.2 / 0.03		44 / 0.72	4.8 / 0.10	6.7 / 0.19	8.1 / 0.13	0.1 / 0.01	0.0	63	NH_4 0.0; ClO_4 0	126	31	38	2	
		7-13-58	67	118	6.7	9.0 / 0.45	4.2 / 0.35	6.8 / 0.30	0.7 / 0.02		41 / 0.67	8.6 / 0.18	6.0 / 0.17	5.9 / 0.10	0.2 / 0.01	0.00	53	NH_4 0.0; ClO_4 0	114	27	40	6	
		5-21-59	66	124	6.7	12 / 0.60	2.2 / 0.18	6.8 / 0.30	0.8 / 0.02		38 / 0.62	5.4 / 0.11	4.8 / 0.14	11 / 0.18	0.1 / 0.00	0.04	61	NH_4 0.0; ClO_4 0	123	27	39	8	
		5-11-60	63	116	7.4	9.1 / 0.45	3.8 / 0.31	6.0 / 0.26	0.4 / 0.01		38 / 0.62	4.8 / 0.10	5.7 / 0.16	7.3 / 0.12	0.1 / 0.00	0.06	58	ClO_4 0	114	25	38	7	
		8-24-61		126	6.6	10 / 0.50	3.6 / 0.30	7.4 / 0.32	0.7 / 0.02		41 / 0.67	5.6 / 0.12	5.4 / 0.15	10 / 0.16	0.2 / 0.01	0.02	62		125	28	40	6	
		8-10-62	64	136	7.7	14 / 0.70	2.4 / 0.20	8.6 / 0.37	1.0 / 0.02		54 / 0.88	5.4 / 0.11	5.8 / 0.16	5.9 / 0.10	0.1 / 0.00	0.06	54	ClO_4 0	123	29	45	1	
Brighton S. & G.	9N/7E-26J1	3-23-55		237	7.8	13 / 0.65	7.9 / 0.65	27 / 1.17	1.3 / 0.03		128 / 2.10	6.4 / 0.13	6.0 / 0.17	3.2 / 0.05		0.2		NH_4 0.4; NO_2 0.0; ClO_4 0		46	65	0	
		7-26-55	72	238									6.9 / 0.20	2.3 / 0.04				NH_4 2.1; NO_2 0.0; ClO_4 1					
County Dump	9N/7E-26N1	1-11-63		227	8.0	18 / 0.90	11 / 0.92	14 / 0.61	1.0 / 0.02		132 / 2.16	7.6 / 0.16	3.6 / 0.10	0.2 / 0.00	0.2 / 0.01	0.01	56	ABS 0.0; ClO_4 2	177	25	91	0	
H. Calyer	9N/7E-27P1	11-12-53	66	166	7.8	8.9 / 0.44	6.3 / 0.52	14 / 0.61	0.6 / 0.02		71 / 1.16	15 / 0.31	5.0 / 0.14	0.8 / 0.01	0.1 / 0.00	0.04	50		136	38	48	0	

a - Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol).

b Determined by addition of constituents

TABLE 9 (Cont)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total[b] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	N.C. ppm	Remarks
H. Calyer	9N/7E-27P1	3-23-55		191	7.8	11/0.55	8.2/0.67	16/0.70	0.6/0.02		88/1.44	6.4/0.13	6.5/0.18	1.6/0.03		0.05		NH_4 0.5; NO_2 0.0; ClO_4 0		35	61	0	
		7-26-55		217									9.0/0.25	3.9/0.06				NH_4 1.4; NO_2 0.0; ClO_4 1					
		5-21-56	69	214	7.9	13/0.65	11/0.93	17/0.74	0.7/0.02		106/1.74	16/0.33	8.5/0.24	3.3/0.06	1.0/0.05	0.05	60	NH_4 0.0	183	32	79	0	
		9-16-57	65	232	7.1	14/0.70	11/0.87	17/0.74	0.9/0.02		102/1.67	13/0.27	9.3/0.26	4.6/0.07	0.1/0.01	0.00	54	NH_4 0.0; ClO_4 1	175	32	78	0	
		7-14-58	66	251	6.8	16/0.80	12/0.96	16/0.70	0.6/0.02		100/1.64	22/0.46	11/0.31	5.0/0.08	0.1/0.00	0.01	52	NH_4 0.0; ClO_4 0	184	28	88	6	
		5-21-59	74	255	7.6	19/0.95	9.1/0.75	18/0.78	0.6/0.02		106/1.74	19/0.40	9.4/0.26	6.6/0.11	0.2/0.01	0.04	54	NH_4 0.0; ClO_4 0	188	31	85	0	
		5-11-60	65	260	8.0	15/0.75	12/1.01	16/0.70	0.3/0.01		106/1.74	16/0.33	9.7/0.27	3.9/0.06	0.1/0.00	0.06	58	ClO_4 0	183	28	88	1	
Aerojet	9N/7E-28B1	7-29-53	70	245	7.3	24/1.20	8.8/0.72	14/0.61	2.6/0.07		142/2.33	2.6/0.05	6.5/0.18	0.0/0.00	0.2/0.01	0.07	73		202	23	96	0	
		11-26-54	70	243									7.0/0.20					NH_4 0.7; ClO_4 0					
		3-23-55		250	7.8	17/0.85	14/1.11	14/0.61	2.3/0.06		141/2.31	12/0.25	7.5/0.21	0.4/0.01		0.19		NH_4 0.5; NO_2 0.0; ClO_4 1		23	98	0	
		7-26-55		247									7.1/0.20	0.2/0.00				NH_4 1.5; NO_2 0.01; ClO_4 1					
		11-4-55	65	245	8.4	24/1.20	8.8/0.73	15/0.65	2.7/0.07		136/2.23	3.0/0.06	7.0/0.20	0.2/0.00	0.1/0.01	0.03	73	NH_4 0.2; ClO_4 2	205	25	96	0	
		5-21-56		247	8.0	23/1.15	5.5/0.45	14/0.61	2.6/0.07		151/2.48	1.0/0.02	8.0/0.23	0.2/0.00	1.0/0.05	0.08	74	NH_4 6.8; ClO_4 18	228	23	80	0	
		9-16-57	67	185	7.5	14/0.70	8.0/0.66	12/0.52	1.8/0.05		98/1.61	1.0/0.02	5.8/0.16	5.0/0.08	0.1/0.01	0.0	72	NH_4 0.0; ClO_4 1	169	27	68	0	
		7-13-58		254	7.3	24/1.20	9.7/0.80	14/0.61	2.5/0.06		144/2.36	1.8/0.04	8.0/0.22	0.1/0.00	0.2/0.01	0.02	70	NH_4 0.0; ClO_4 0	200	23	100	0	
		5-21-59	68	243	7.7	24/1.20	7.5/0.62	14/0.61	2.3/0.06		142/2.33	1.0/0.02	5.3/0.15	0.6/0.01	0.2/0.01	0.04	68	NH_4 0.0; ClO_4 0	193	24	91	0	
		5-11-60	70	244	8.1	24/1.20	9.1/0.75	13/0.56	2.4/0.06		138/2.26	1.6/0.03	7.8/0.22	0.2/0.00	0.2/0.01	0.02	71	NH_4 0.0; ClO_4 0	197		98	0	
Aerojet	9N/7E-28K1	4-3-56		266	8.0	23/1.15	14/1.17	12/0.52	1.4/0.04		153/2.51	4.0/0.08	7.0/0.20	4.2/0.07	1.0/0.05	0.03	5.6	NH_4 1.1	199	18	116	0	Sampled 89-90' Cased off below 125'
		4-23-56		219	7.3	17/0.85	12/0.99	16/0.70	2.1/0.05		133/2.18	6.0/0.12	10/0.28	0.5/0.01	0.7/0.04	0.13	67	NH_4 0.6	198	27	92	0	Sampled 192-326' Plugged later at 300'

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol).

b Determined by addition of constituents

TABLE 9 (Cont.)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total dissolved solids in ppm[b]	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Remarks
						Mineral constituents in parts per million / equivalents per million																	
Aerojet	9N/7E-28K1	9-16-57	67	244	7.4	23 / 1.15	8.8 / 0.72	14 / 0.61	3.0 / 0.08		140 / 2.29	2.9 / 0.06	8.0 / 0.23	0.2 / 0.00	0.1 / 0.01	0.00	72	NH_4 0.0; ClO_4 1	202	24	94	0	
		7-14-58		226	7.6	18 / 0.90	9.2 / 0.76	14 / 0.61	2.1 / 0.05		129 / 2.11	1.3 / 0.03	5.4 / 0.15	0.3 / 0.00	0.2 / 0.01	0.01	62	NH_4 0.0; ClO_4 0	176	26	83	0	
		5-21-59	69	242	7.1	24 / 1.20	7.3 / 0.60	14 / 0.61	2.3 / 0.06		138 / 2.26	1.0 / 0.02	5.5 / 0.16	0.8 / 0.01	0.2 / 0.01	0.03	74	NH_4 0.0; ClO_4 0	197	25	90	0	
		5-11-60	69	241	7.8	20 / 1.00	10 / 0.84	13 / 0.56	2.0 / 0.05		136 / 2.23	0.0 / 0.00	5.9 / 0.17	0.4 / 0.01	0.2 / 0.01	0.03	73	NH_4 0.2; ClO_4 0	192	23	92	0	
		8-16-61		241	7.1	20 / 1.00	9.7 / 0.80	14 / 0.61	2.2 / 0.06		135 / 2.21	1.6 / 0.03	5.7 / 0.16	1.3 / 0.02	0.2 / 0.01	0.02	73		194	25	90	0	
		8- 3-62		235	7.7	23 / 1.15	7.9 / 0.65	14 / 0.61	2.3 / 0.06		131 / 2.15	3.4 / 0.07	7.1 / 0.20	0.0 / 0.00	0.2 / 0.01	0.02	63	ClO_4 0	185	25	90	0	
Aerojet Test Well	9N/7E-28M1	9-13-62	68	274	7.1	25 / 1.25	13 / 1.07	14 / 0.61	1.4 / 0.04		163 / 2.67	5.9 / 0.12	3.8 / 0.11	1.6 / 0.02	0.3 / 0.02	0.04	45		190	20	116	0	Thiefed
		9-13-62	68	265	7.2	24 / 1.20	13 / 1.08	13 / 0.56	1.3 / 0.03		157 / 2.57	5.4 / 0.11	3.6 / 0.10	0.4 / 0.01	0.2 / 0.01	0.04	50		188	20	114	0	Mobile pump unit
Aerojet Test Well	9N/7E-29C1	9-13-62		256	7.3	26 / 1.30	9.2 / 0.76	15 / 0.65	1.7 / 0.04		146 / 2.39	9.0 / 0.19	4.2 / 0.12	0.2 / 0.00	0.3 / 0.02	0.08	15		153	24	103	0	Thiefed
		9-13-62	67	273	7.3	27 / 1.35	10 / 0.85	17 / 0.74	1.7 / 0.04		161 / 2.64	8.9 / 0.18	3.1 / 0.09	0.6 / 0.01	0.3 / 0.02	0.05	31		179	25	110	0	Mobile pump unit
J. A. Rodgers	9N/7E-32B1	3-23-55		102	7.3	7.6 / 0.38	5.1 / 0.42	4.8 / 0.21	0.3 / 0.01		47 / 0.77	3.1 / 0.06	3.0 / 0.08	4.0 / 0.06		0.15		NH_4 0.2; NO_2 0.0; ClO_4 0		20	40	1	
		7-26-55	69	102									3.2 / 0.09	2.9 / 0.05				NH_4 1.3; NO_2 0.0; ClO_4 2					
		11- 4-55	57	105				8.0 / 0.35					2.0 / 0.06								41		
		5-21-56	69	105	7.5	7.6 / 0.38	7.6 / 0.62	5.5 / 0.24	0.5 / 0.01		61 / 1.00	5.0 / 0.10	4.0 / 0.11	3.5 / 0.06	1.0 / 0.05	0.14	59	NH_4 1.1	125	18	50	0	
		9-16-57	66	116	7.2	8.2 / 0.41	5.5 / 0.45	6.2 / 0.27	0.8 / 0.02		55 / 0.90	1.9 / 0.04	4.0 / 0.11	5.9 / 0.10	0.0 / 0.00	0.00	54	NH_4 0.0; ClO_4 2	116	23	43	0	
		7-14-58	70	133	6.8	12 / 0.60	5.4 / 0.44	5.4 / 0.23	0.6 / 0.02		59 / 0.97	4.3 / 0.09	3.3 / 0.09	5.7 / 0.09	0.1 / 0.00	0.00	50	NH_4 0.0; ClO_4 0	154	18	52	4	
		5-21-59	66	149	7.4	13 / 0.65	6.0 / 0.49	6.0 / 0.26	0.6 / 0.02		65 / 1.06	4.4 / 0.09	3.4 / 0.10	10 / 0.16	0.1 / 0.00	0.02	53	NH_4 0.0; ClO_4 0	128	18	57	4	
		5-11-60	68	147	7.8	11 / 0.55	7.4 / 0.61	6.2 / 0.27	0.6 / 0.02		68 / 1.11	3.3 / 0.07	3.9 / 0.11	5.4 / 0.09	0.1 / 0.00	0.04	52	ClO_4 0	123	19	58	2	
		8-24-61		201	6.8	16 / 0.80	10 / 0.84	8.0 / 0.35	0.6 / 0.02		96 / 1.57	6.6 / 0.14	5.0 / 0.14	7.0 / 0.11	0.2 / 0.01	0.04	53		153	17	82	3	

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol)

b Determined by addition of constituents

TABLE 9 (Cont.)

MINERAL ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total[b] dissolved solids in ppm	Per cent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Remarks
						Mineral constituents in parts per million / equivalents per million																	
J. A. Rodgers	9N/7E-32B1	8-10-62	67	181	7.3	15/0.75	9.4/0.77	8.0/0.35	0.5/0.01		90/1.48	4.6/0.10	5.4/0.15	5.4/0.09	0.1/0.00	0.06	46	ClO_4 0	138	19	76	2	
Ben Petruci	9N/7E-33E1	3-23-55		192	7.8	12/0.60	13/1.08	7.9/0.34	0.9/0.02		105/1.72	17/0.35	1.0/0.03	0.2/0.00		0.04		NH_4 0.4; NO_2 0.01; ClO_4 0		17	84	0	
		7-26-55	69	205									4.1/0.12	0.1/0.00				NH_4 1.3; NO_2 0.0; ClO_4 0					
		5-21-56	69	351	8.2	33/1.65	23/1.85	11/0.48	1.0/0.03		218/3.57	9.0/0.19	10/0.28	0.0/0.00	1.0/0.05	0.06	46	NH_4 0.0	241	12	175	0	
		9-16-57	68	414	7.0	39/1.95	24/2.01	12/0.52	1.4/0.04		236/3.87	6.7/0.14	16/0.45	0.0/0.00	0.0/0.00	0.00	43	NH_4 0.0; ClO_4 3	261	12	198	4	
		7-14-58		566	7.2	54/2.69	35/2.86	6.3/0.27	1.2/0.03		317/5.20	3.0/0.06	26/0.73	0.1/0.00	0.1/0.00	0.01	42	NH_4 0.0; ClO_4 0	324	5	278	18	
		5-21-59		593	7.0	63/3.14	32/2.61	13/0.56	1.3/0.03		322/5.28	8.1/0.17	31/0.87	0.3/0.00	0.0/0.00	0.02	44	NH_4 0.0; ClO_4 0	351	9	288	24	
		5-11-60	65	450	8.1	26/1.30	36/2.92	12/0.52	1.2/0.03		232/3.80	4.9/0.10	32/0.90	0.1/0.00	0.0/0.00	0.02	43	ClO_4 0	269	11	211	21	
		8-24-61		403	6.9	38/1.90	23/1.86	11/0.48	1.0/0.02		220/3.60	7.1/0.15	16/0.45	0.9/0.01	0.1/0.00	0.02	43		248	11	188	8	
		8-10-62		342	7.7	31/1.55	18/1.47	11/0.48	0.9/0.02		186/3.05	6.4/0.13	11/0.31	0.0/0.00	0.1/0.00	0.02	38	ClO_4 0	207	14	151	0	

a Alkyl Benzene Sulfonate (ABS), Ammonium (NH_4), Carbon Dioxide (CO_2), Iron (Fe), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol)

b Determined by addition of constituents

TABLE 9 (Cont.)

MINERAL ANALYSIS OF GROUND WATER FROM TEST HOLES

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Well number	Date sampled	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million													Total dissolved solids in ppm [b]	Percent sodium	Hardness as $CaCO_3$		Remarks
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents [a]			Total ppm	N.C. ppm	
Clinch Trustees	8N/7E-22G1	2- 6-63	70	132	7.8	6.6 / 0.33	1.6 / 0.13	20 / 0.87	1.0 / 0.02		55 / 0.90	0.0 / 0.00	8.6 / 0.24	9.3 / 0.15	0.5 / 0.03	0.09	80	ABS 0.0; ClO_4 0	155	64	23	0	Thiefed
M. Waegell	8N/7E-29L1	2- 6-63	68	237	8.1	14 / 0.70	8.8 / 0.72	22 / 0.96	2.4 / 0.06		126 / 2.06	0.5 / 0.01	13 / 0.37	0.1 / 0.00	0.4 / 0.02	0.04	8.8	ABS 0.0; ClO_4 0	132	39	71	0	Thiefed
Pacific Cement & Agg.	9N/7E-17N1	2- 6-63	64	329	8.2	35 / 1.75	12 / 1.01	15 / 0.65	2.7 / 0.07		184 / 3.02	12 / 0.25	4.3 / 0.12	1.4 / 0.02	0.1 / 0.00	0.04	28	ABS 0.0; ClO_4 1	200	19	138	0	Thiefed
Pacific Cement & Agg.	9N/7E-19B1	2- 6-63	62	98	7.8	8.7 / 0.43	3.3 / 0.27	5.9 / 0.26	1.5 / 0.04		52 / 0.85	3.0 / 0.06	2.8 / 0.08	0.1 / 0.00	0.0 / 0.00	0.05	22	ABS 0.0; ClO_4 0	73	26	35	0	Thiefed

a Alkyl Benzene Sulfonate (ABS), Perchlorate (ClO_4).
b Determined by addition of constituents.

TABLE II

ORGANIC ANALYSIS OF GROUND WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Location of Sampling Point	Date Sampled	Total Extract		Chloroform Extractables		Alcohol Extractables		Group Separation of Chloroform Extractables																Group Separation of Neutrals									
								Ether Insolubles		Water Solubles		Amines		Strong Acids		Weak Acids		Neutrals (see breakdown)		Total		Loss		Aliphatics		Aromatics		Oxygenates		Total		Loss	
		ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%	ppb	%
8N/6E-3Q1	3-8-63 3-21-63	173		114	65.9	59	34.1	0	0.1	2	1.7	0	0.4	4	3.3	48	41.8	49	43.1	103	90.4	11	9.6	21	42.4	9	18.5	18	36.2	48	97.1	1	2.9
8N/6E-8H9	2-15-62 3-1-62					58		0		0		0		0		0										0		1				1	
8N/6E-13B1	3-7-63 3-21-63	22		11	49.6	11	50.4	0	0.5	0	3.9	2	19.0	0	4.0	2	14.2	6	56.9	10	98.5	1	1.5	3	49.3	1	16.3	2	31.2	6	96.8	0	3.2
8N/6E-21N2	3-7-63 3-21-63	108		48	44.5	60	55.5	0	0.6	3	5.2	1	2.1	1	3.1	8	17.0	31	63.4	44	91.4	4	8.6	13	41.0	6	19.7	11	34.3	30	95.0	1	5.0
8N/6E-27G2	3-22-62 3-7-62					5		0		0		0		0		0						1				0		1				0	
8N/6E-29L1	2-16-62 3-1-62					27		0		0		0		0		0										0		1				0	
8N/7E-9K1	4-4-62 4-19-62					42		0		1		0		1		4						0				1						0	
8N/7E-9K1	2-14-63 2-28-63	23		12	51.8	11	48.2	0	0.0	0	3.7	0	1.2	0	3.7	3	21.5	7	56.8	10	86.9	2	13.1	3	38.8	1	18.4	3	37.3	7	94.5	0	5.5
8N/7E-30A1	3-7-63 3-21-63	464		376	82.8	88	17.2	0	0.0	2	0.5	17	4.5	6	1.6	125	33.3	193	51.4	343	91.3	33	8.7	146	75.7	19	9.6	25	12.8	190	98.1	3	1.9
9N/6E-23Q2	4-2-62 4-19-62					218		0		4		0		2		1						6				0		1				2	
9N/6E-24J1	2-14-63 2-28-63	47		6	12.5	41	87.5	0	0.0	1	21.6	0	1.7	0	4.6	1	10.5	3	49.5	5	87.9	1	12.1	0	16.9	0	12.2	2	68.0	2	97.1	1	2.9
9N/7E-21D1	3-6-62 3-20-62					38		0		1		0		0		0						4				0		1				2	
9N/7E-21D1	5-18-62 6-3-62	43		8	18.3	35	81.7	0	0.6	1	12.0	0	2.6	1	8.7	2	18.9	4	44.8	8	87.6	0	12.4	0	6.8	0	10.2	3	75.5	3	92.5	1	7.5
9N/7E-26J1	3-15-62 3-29-62					79		1		8		1		17		34						50										8	
9N/7E-26J1	7-25-62 8-13-62	114		57	49.8	57	50.2	0	0.0	1	1.4	0	0.2	0	0.6	5	9.0	7	12.6	13	23.8	44	76.2	3	42.7	1	11.5	3	42.0	7	96.2	0	3.8
9N/7E-28K1	2-14-63 2-28-63	31		19	60.3	12	39.7	7	38.6	0	1.8	0	0.8	0	1.0	1	3.0	9	50.1	17	95.3	2	4.7	6	66.8	1	8.2	2	21.6	9	96.6	0	3.4
9N/7E-31G1	3-12-62 3-26-62					50		1		2		0		1		0						7				0		1				1	
9N/7E-32B1	2-14-63 2-28-63	151		40	26.4	111	73.6	1	2.3	5	13.5	0	0.7	6	15.6	4	11.1	7	17.5	23	60.7	17	39.3	2	24.1	1	10.0	4	60.1	7	94.2	0	5.8

TABLE 13

MINERAL ANALYSIS OF SURFACE WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Location number	Date sampled	Discharge in cfs	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Mineral constituents in parts per million / equivalents per million: Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents[a]	Total[b] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$: Total ppm	Hardness as $CaCO_3$: N.C. ppm	Remarks
American River, 1/4 mile downstream from new Fair Oaks Bridge, south bank.		1- 5-62		49	100	7.3	9.6 0.48	4.4 0.36	3.1 0.13	1.3 0.03		49 0.80	6.0 0.12	3.2 0.09	0.4 0.01	0.0 0.00	0.00	8.9	NH_4 0.1; NO_2 0.00; ClO_4 0; CN 0.0; Phenol 0.001; Cu 0.00; Al 0.030; Be <0.0010; Bi 0.0013; Cd <0.0025; Co 0.018; Cr <0.0025; Cu <0.0025; Fe 0.0055; Ga <0.010; Ge <0.0005; Mn <0.0025; Mo <0.0005; Ni 0.002; Pb ≥0.0025; Ti <0.0010; V ≥0.0005; Zn <0.020	61	13	42	2	1500 PST
American River, 1.0 mile downstream from new Fair Oaks Bridge, south bank.		1- 5-62		47	77	7.2	7.6 0.38	3.0 0.25	2.4 0.10	1.1 0.03		35 0.57	4.0 0.08	3.0 0.08	0.2 0.00	0.0 0.00	0.00	5.9	NH_4 0.0; NO_2 0.00; ClO_4 0; Cu 0.00; Phenol 0.001; CN 0.0; Al 0.030; Be <0.001; Bi <0.0005; Cd <0.0025; Co <0.0025; Cr <0.0025; Cu <0.0025; Fe 0.0044; Ga <0.010; Ge <0.0005; Mn <0.0025; Mo <0.0005; Ni ≥0.0005; Pb <0.0025; Ti 0.0023; V ≥0.0005; Zn <0.020	44	13	32	3	1310 PST

a Ammonium (NH_4), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol), Aluminum (Al), Copper (Cu), Cyanide (CN), Beryllium (Be), Bismuth (Bi), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Iron (Fe), Gallium (Ga), Germanium (Ge), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Lead (Pb), Titanium (Ti), Vanadium (V), Zinc (Zn)

b Determined by addition of constituents

TABLE 13 (Cont.)

MINERAL ANALYSIS OF SURFACE WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Mineral constituents in parts per million / equivalents per million

Source	Location number	Date sampled	Discharge in cfs	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO3)	Bicarbonate (HCO3)	Sulfate (SO4)	Chloride (Cl)	Nitrate (NO3)	Fluoride (F)	Boron (B)	Silica (SiO2)	Other constituents[a]	Total[b] dissolved solids in ppm	Percent sodium	Hardness as CaCO3 Total ppm	Hardness as CaCO3 N.C. ppm	Remarks
Morrison Creek, 1.0 mile upstream from Sacramento Signal Depot		4-24-62			312	7.0	11/0.55	9.8/0.81	32/1.39	11/0.28		106/1.74	17/0.35	23/0.65	8.5/0.14	0.7/0.04	0.30	52	Zn 0.03; CN 0.0; Al 0.036; Be < 0.0010; Bi < 0.0010; Cd < 0.0050; Co < 0.0050; Cr < 0.0050; Fe 0.0044; Ga < 0.020; Ge < 0.0010; Mn 0.014; Mo < 0.0010; Ni 0.0062; Pb < 0.0050; Ti < 0.0020; V 0.0048; Zn < 0.020;	217	46	68	0	1100 PST
Morrison Creek, 100 feet east of Hedge Avenue		1-16-63		40	279	7.8	11/0.55	6.7/0.55	32/1.39	7.0/0.18		80/1.31	16/0.33	18/0.51	25/0.40	0.9/0.05	0.26	51	ABS 0.8; ClO_4 0	207	52	55	0	1030 PST

a Ammonium (NH_4), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol), Aluminum (Al), Copper (Cu), Cyanide (CN), Beryllium (Be), Bismuth (Bi), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Iron (Fe), Gallium (Ga), Germanium (Ge), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Lead (Pb), Titanium (Ti), Vanadium (V), Zinc (Zn).

b Determined by addition of constituents

TABLE 13 (Cont.)

MINERAL ANALYSIS OF SURFACE WATER

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Source	Location number	Date sampled	Discharge in cfs	Temp in °F	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Other constituents [a]	Total [b] dissolved solids in ppm	Percent sodium	Hardness as $CaCO_3$ Total ppm	Hardness as $CaCO_3$ N.C. ppm	Remarks
							Mineral constituents in parts per million / equivalents per million																	
Buffalo Creek at confluence with American River		1- 5-62		43	149	7.1	9.2 / 0.46	4.3 / 0.35	5.3 / 0.23	1.8 / 0.05		43 / 0.70	7.0 / 0.15	12 / 0.34	23 / 0.37	0.2 / 0.01	0.00	8.3	Phenol 0.003; CN 0.0; NH4 4.3; ClO4 0; NO2 1.50; Cu 0.00; Al 0.030; Be <0.0010; Bi <0.0005; Cd ≥0.0025; Co 0.0033; Cr ≥0.0025; Cu <0.0025; Fe 0.025; Ga <0.0010; Fe 0.0005; Mn >0.250; Mo ≥0.0005; Ni 0.0040; Pb <0.0025; Ti ≥0.0010; V 0.0032; Zn <0.020	98	17	40	5	1330 PST
Buffalo Creek at Citrus Road		1- 5-62		44	150	7.1	9.6 / 0.48	4.4 / 0.36	4.5 / 0.20	1.7 / 0.04		38 / 0.62	5.0 / 0.10	10 / 0.28	27 / 0.44	0.0 / 0.00	0.00	8.4	NH4 5.2; NO2 3.50; ClO4 0; Cu 0.00; Phenol 0.006; CN 0.0; Al 0.014; Bi <0.0005; Be <0.0010; Cd <0.0025; Co ≥0.0025; Cr <0.0025; Fe 0.015; Ga <0.010; Mn 0.210; Ge <0.0005; Ni 0.0033; Pb <0.0025; V 0.0014; Ti <0.001; Zn <0.020; Mo <0.0005;	98	15	42	11	1515 PST

a Ammonium (NH_4), Nitrogen Dioxide (NO_2), Perchlorate (ClO_4), Phenolic Compounds (Phenol), Aluminum (Al), Copper (Cu), Cyanide (CN), Beryllium (Be), Bismuth (Bi), Cadmium (Cd), Cobalt (Co), Chromium (Cr), Iron (Fe), Gallium (Ga), Germanium (Ge), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Lead (Pb), Titanium (Ti), Vanadium (V), Zinc (Zn).

b Determined by addition of constituents

TABLE 14

MINERAL ANALYSIS OF WASTE WATER

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Mineral constituents in parts per million / equivalents per million

Number	Source	Date Sampled	Specific conductance (micromhos at 25°C)	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Ammonium (NH_4)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Phosphate (PO_4)	Fluoride (F)	Boron (B)	Silica (SiO_2)	Total dissolved solids (ppm)[b]	Per cent sodium	Hardness as $CaCO_3$ Total (ppm)	Hardness as $CaCO_3$ N.C. (ppm)	Remarks[a]
	Cordova Sewage Treatment Plant, Rancho Cordova (final effluent)	9- 2-59 8-hour composite	640	7.5	11/0.55	20/1.61	59/2.57	13/0.33	21/1.16	0/0.00	238/3.90	25/0.52	47/1.32	0.7/0.07	43		0.4	56	413	41	108	0	
	(final effluent)	8- 2-60 24-hour composite	669	7.7	11/0.55	18/1.51	51/2.22	13/0.33	31/1.72	0/0.00	261/4.28	23/0.48	49/1.38	0.5/0.01	44		0.2	65	359	35	103	0	
	(final effluent)	4-20-61 24-hour composite	694	7.8	19/0.95	13/1.09	56/2.44	14/0.36	2.4/0.13	0/0.00	293/4.80	30/0.62	37/1.04	1.9/0.03	43	0.2/0.01	0.5	48	364	49	102	0	
	(final effluent)	1-23-63 24-hour composite	757	7.9	22/1.10	11/0.90	64/2.78	15/0.38	43/2.38	0/0.00	309/5.06	27/0.56	48/1.35	1.3/0.02	40	0.2/0.01	0.6	56	397	37	99	0	ABS 8.0
	Manlove Sewage Treatment Plant South of Fruitridge Road on Hedge Avenue (final effluent)	1-24-63 24-hour composite	780	7.7	21/1.05	11/0.91	62/2.70	15/0.38	42/2.33	0/0.00	276/4.52	25/0.52	68/1.92	1.6/0.02	50	0.2/0.01	0.5	59	399	37	98	0	ABS 7.6
	Mather Air Force Base Sewage Treatment Plant South of runways (outlet from secondary digestor)	6-28-56 24-hour composite	359	7.2	8.8/0.44	8.5/0.70	36/1.57	7.3/0.19	0.1/0.01	0/0.00	140/2.30	25/0.52	14/0.40	8.0/0.13			0.25	59	236	54	57	0	Oil 3.4
	(pond effluent)	6- 3-59 24-hour composite	265	9.4	9.6/0.48	5.6/0.46	37/1.61	8.2/0.21	2.9/0.16	22/0.73	22/0.36	10/0.21	25/0.70	0.6/0.01	20	0.8/0.04	0.35	65	207	55	47	11	
	(final effluent)	9- 2-59 24-hour composite	378	7.3	11/0.55	7.7/0.63	35/1.52	6.6/0.17	14/0.78	0/0.00	141/2.31	19/0.40	18/0.51	7.4/0.12	20		0.2	59	267	42	59	0	
	(chlorine contact chamber)	11-15-62 24-hour composite	510	7.4	16/0.80	6.1/0.50	44/1.91	8.4/0.21	21/1.50	0/0.00	190/3.11	21/0.44	23/0.65	42/0.68	5.0	0.7/0.04	0.6	60	315	39	65	0	ABS 5.4; G.& O. 19; Al 0.02; As 0.00; Cu 0.02; Pb 0.03; Mn 0.04; Zn 0.09; Cr^{+6} 0.01; Fe (total) 0.11

a Alkyl Benzene Sulfonate (ABS), Grease and Oil (G.&O), Aluminum (Al), Arsenic (As), Copper (Cu), Lead (Pb), Manganese (Mn), Zinc (Zn), Hexavalent Chromium (Cr^{+6}), Iron (Fe)

b Determined by addition of constituents.

APPENDIX A

GEOLOGY

APPENDIX A

GEOLOGY

The Sacramento Valley, in which the area of investigation lies, is a structural trough bounded on the east and west by mountainous areas. On the east the Sierra Nevada rises gradually from the valley floor, while the Coast Ranges to the west rise more abruptly.

The Sierra Nevada is a tilted fault block with a sharp escarpment facing the east and a gentle decline to the west. The uplands grade gradually westward through low foothills, alluvial fans and basin lowlands. The basement rock of the Sierra Nevada, consisting largely of igneous and metamorphic rock, extends westward beneath the valley floor, underlying the younger sedimentary rocks.

The sedimentary deposits, on which the recent topography has been developed, are the most important as water-bearing units. These deposits comprise older sedimentary formations and younger alluvium. The older deposits are exposed along the edges of the valley in the low, rolling foothills. These formations dip gently toward the center of the valley. Between the edges of the valley and its center, the older formations pass beneath younger alluvium, which occurs as low-lying alluvial fans and plains. In the center of the valley adjacent to the Sacramento River, low, flat, floodplain deposits exist. These are occasionally covered by flood waters and may have high water tables and alkaline soils. Stream channel deposits crossing the older alluvial and rock units are found along the major streams extending from the Sierras toward the low floodplains.

The valley has been a structural trough since Pre-Cretaceous time, bounded roughly by the same highland areas which enclose it today. During Cretaceous time and much of the Tertiary, marine waters covered the valley. These waters were connected with the open sea by embayments and channels which frequently changed their positions as the landmasses rose and were eroded away. It was during this time that the bulk of the sediments now filling the valley trough were deposited. This material was derived from the ancestral Sierras on the east and peninsular and island landmasses on the west. Intermittent vulcanism furnished volcanic debris and became more frequent in the Sierras in middle and late Tertiary time.

During late Tertiary time rising landmasses forced the extension of the sea covering the valley to begin a gradual retreat leaving brackish and fresh water lakes covering the valley floor. Erosion of the rising landmasses was accelerated and continental deposits spread into the valley with contemporaneous deltaic and lacustrine sediments being deposited in the center of the valley area. In recent time the lakes have diminished and erosion from renewed uplift has led to the dominance of continental deposits.

Along the eastern edge of the area of investigation the dissected alluvial uplands make up a rather distinct topographic surface. The surface is underlain by the water-bearing Laguna and Mehrten formations. It is bounded on the east by nonwater-bearing marine sediments, metamorphic, and granitic rocks. While the alluvial uplands are a series of dissected terraces whose surface slopes are somewhat variable, the surfaces generally slope about 20 feet per mile toward the southwest. These terraces differ in altitude by 25 to 50 feet, with the most prominent ones occurring at elevations of about 125,150, 200, and 225-275 feet. The highest erosion surface is indicative of a time of plantation of the Laguna surface, and the lower surface represent subsequent terracing developed during northwestward lateral movements of the American River. This process has resulted in the present sharp bluff immediately bordering the north bank of the river and the lack of any major bluff along the southern bank of the river. The American River in its northward downcutting movements has cut into the Laguna formation and has partially backfilled with sands, clays, and gravels which today make up the low alluvial plains of the Victor Formation.

Dissection of the upland surface has reduced its probably nearly planar original terraces to a series of rolling highs and lows. From the west, Morrison and Elder Creeks have cut re-entrant notches into the lower terrace, while on the south, Laguna Creek has cut northeastward into the surface. These alluvial uplands, commonly called "red lands," are characterized by mound and hollow, or "hog wallow" topography and are covered in many areas by a surface layer of quartzose gravels.

The low alluvial plain, overlying in part and butting against the dissected uplands, is commonly known as the Victor plain in this area for the underlying Victor Formation. Subsequent to the period of downcutting and channeling of the American River across the Laguna surface, a period of deposition resulted in the formation of a flat, featureless surface spreading outward from the major drainage streams of the east side. The Victor plain originally resulted from the formation of coalescing alluvial fans with their apices at or near the point where the streams entered the valley proper. The general slope of the fans is toward the southwest at about 5 to 10 feet per mile. Dissection of these plains is not nearly so advanced as is that of the uplands, in part due to the lesser slopes of the former and in part to their younger age. In general, the low plains have been constructional features until recent time and only recently has degradation begun to shape the topographic surface they exhibit today. Minor terracing is observed superimposed on the Victor plain, mainly in connection with the recent entrenchment of the American River into its present channel.

Stream channel and flood plain deposits are found in the immediate vicinity of the major streams of the area. Flowing across and entrenched in the entire section is the American River. The channel and flood plain deposits of this stream vary in width from a few hundred feet, in the vicinity of Folsom where the river leaves the basement rock, to about a mile at the western edge of the area of investigation. The surface of this flood plain slopes toward the west at about the same gradient as the stream, approximately five feet per mile, characterized by abandoned channels and extensive bar deposits. Containment of the river by levees will further entrench it in its present channel.

In the eastern part of the area, Deer Creek and its tributaries, Coyote and Carson Creek, have cut deeply into the Laguna surface in the process of becoming graded with the Cosumnes River and have cut a broad erosional trench between the dissected uplands and the bedrock complex of the foothills. Deer Creek has constructed a flood plain of alluvial material averaging 3/8 of a mile in width.

Piles of dredge tailings from 20 to 75 feet thick are found throughout the area. Where the dredges have traversed the boundaries between the different physiographic units, the breaks in slopes and geology have been masked or destroyed. These surfaces are characterized by the serpentine-like piles of tailings and remnant ponds. Destruction of the tailings is now taking place by commercial development within the area.

Stratigraphy

The geologic formations within the area of investigation range in age from Pre-Cretaceous to Recent. Pre-Cretaceous granitic and metamorphic rocks forming the basement complex are exposed in the eastern edge of the area and, from the few wells which have reached to them at depth, appear to dip about 3 to 4 degrees beneath the overlying sediments. Overlying the basement rocks are Cretaceous marine sediments which crop out sporadically in the vicinity of Folsom, the Eocene Ione Formation which crops out in a narrow band south from White Rock Road, and the Valley Springs Formation which is found slightly north of the Cosumnes River. These formations are all considered as nonfreshwater-bearing. Either they do not have sufficient permeability to transmit other than minor amounts of water or they contain connate salt water.

Freshwater-bearing units overlie the nonfreshwater-bearing formations. The freshwater-bearing formations are the Mio-Pliocene Mehrten Formation, the Plio-Pleistocene Laguna Formation, and the Pleistocene Victor Formation. Recent stream deposits, and dredge tailings are also considered in this report as freshwater-bearing units.

Formations

Three principal geologic formation directly underlie the Folsom-East Sacramento area. These are the Mehrten, Laguna, and Victor Formations which are shown on Plate 2. The vertical sections at lines A-A' and B-B' are shown on Plate 3. The reader will find it helpful to have these plates before him while reading the stratigraphy portion of this report.

Mehrten Formation. The lowest freshwater-bearing formation on the east side of the valley is the Mehrten Formation. It extends discontinuously from the vicinity of Oroville on the north to the Merced-Madera county line to the south. It overlies the impervious Valley Springs Formation and can be traced in the subsurface to the center of the valley. Outcrops of the formation are found along the eastern border of the valley. This formation strikes to the northwest with a dip of from 50 to 100 feet per mile and can usually be recognized in the logs of both oil and water well drillers when they penetrate it.

The Mehrten Formation, as it is found in the valley, is essentially composed of medium to coarse andesitic sandstone beds with interspersed light-colored tuffaceous silty and clayey beds. These sands are usually easily recognizable by their iron-gray to black coloration and predominance of fragments of andesite. Brecciated andesitic mudflow material or agglomerates are found capping some of the more resistant ridges at the surface and are found occasionally in the subsurface. These agglomerates contain blocks of fresh andesite up to two feet through and are quite hard and impervious.

The origin of the material composing the Mehrten Formation appears to have been the volcanic ejecta and debris from the period of

Mio-Pliocene vulcanism in the high Sierra. Streams flowing westward across this terrain swept the loose material out into the valley depositing it as well-sorted, loose to consolidated sands and clays, which reach a thickness of about 500 feet.

The Mehrten Formation is tapped by irrigation and industrial wells rather extensively along the eastern border of the valley. Most of the deeper wells show some sign of the "black sands", as they are termed by most drillers, that are indicative of the Mehrten Formation. Very few of these wells, however, tap only the Mehrten and most represent a composite yield from the overlying material and the Mehrten.

The permeability of the Mehrten Formation is quite variable due to its changing lithologic character both horizontally and vertically. The formation is less consolidated and the number of hard tuff-breccia beds decreases in its western portion. The upper part of the formation may have a higher percentage of clay and fine-grained sediments than the middle or lower part. The presence of these clay and tuff-breccia beds, together with the overlying Laguna Formation, confines the water in the underlying more permeable sands, thus creating pressure conditions throughout most of the formation. The sand and gravel strata within the formation are generally moderately to highly permeable.

During the drilling of test hole 9N/7E-17N1, samples were gathered and sent to the Department of Water Resources Laboratory for mechanical analysis and permeability tests. Two constant-head permeability tests were conducted on these samples. The tests showed permeabilities of 501 and 438 gallons per day per square foot. The samples had a porosity of 49-50 percent, yet would probably be shown in drillers logs as "hard" or "cemented black sand." The sand is consolidated but not cemented.

An indication of the well characteristics within the Mehrten Formation may be seen from the following summary of average conditions of 18 wells which are perforated partially or wholly within the formation.

Well Depth	416 feet
Gallons per minute (gpm)	1,098
Specific Capacity 1/	38
Yield Factor (saturated thickness)2/	14
Yield Factor (aquifer sands only)3/	50

1/ The specific capacity of a well is the discharge (gpm) divided by the drawdown (feet).
2/ The specific capacity divided by the thickness in feet of saturated material penetrated by a well, multiplied by 100.
3/ The specific capacity divided by the thickness of water-bearing aquifers only which are open to the well, multiplied by 100.

Natural recharge to the Mehrten Formation is effected in the outcrop areas, primarily where major streams cross the outcrops and secondarily where rainfall infiltrates the permeable sands. The rates of recharge are not known, but it is probable that infiltration rates are generally fairly high.

The Mehrten Formation underlies Nimbus Reservoir and this may contribute heavily to the recharge of the more permeable zones. In the southern part of the area, Deer Creek and the unnamed creek immediately west of Deer Creek flow across Mehrten exposures, and percolation from these streams, primarily during the winter months, enters the Mehrten aquifers. The Cosumnes River flows over a considerable outcrop area of the Mehrten Formation and no doubt contributes to the recharge in the southern area.

Laguna Formation. The Laguna Formation, which in this report includes the Arroyo Seco Gravels, is a sequence of predominantly fine-grained, poorly bedded, somewhat compacted continental sedimentary deposits laid down after the major andesitic episode in the late Miocene and early Pliocene and before the last major tilting of the Sierra Nevada in the Pleistocene period. The Arroyo Seco Gravels and other gravels of uncertain age are coarse-grained, poorly sorted deposits that form a discontinuous cap on the Laguna and older formations.

At many places, it is difficult to determine the subsurface boundaries between the Laguna Formation or the underlying volcanic rocks from the Sierra Nevada and the overlying Victor Formation and related deposits, particularly near the axis of the valley, where deposition may have continued during the hiatuses represented by unconformities near the valley margin.[1/]

The thickness of the Laguna Formation varies from east to west. Along the western border of the area, where the formation outcrops, it has been partially eroded and pinches out against the underlying formations. The base of the formation dips in a westerly direction, and lies about 650 feet below the surface at the western edge of the area of investigation. In effect, the Laguna is a wedgeshaped deposit, thinning near the Sierras, and thickening to probably more than 1,000 feet near the axis of the valley.

1/ After Olmsted, F. H., and Davis, G. H., Geologic Features and Groundwater Storage Capacity of the Sacramento Valley, California, Geological Survey Water-Supply Paper 1497, Washington, D.C., 1961.

The physical characteristics of the Laguna Formation are extremely varied. The formation probably was deposited as a series of stream deposits, reworked channel deposits, and flood plain deposits forming coalescing alluvial fans that spread westward across the area of investigation. This resulted in an extremely heterogeneous group of silts, clays, sands, and gravels. From the well logs available, it appears that the finer grained material predominates with lenticular sands and gravels interspersed. Yellow-brown, brown, and minor red and white clays, sandy clays, and fine sands are the most common units shown in the drillers' logs representing the Laguna Formation. Gravels are more common toward the east and sometimes are referred to as clayey or cemented. There are indications of somewhat continuous water-bearing gravel strata that dip toward the west at about 25 feet per mile.

The Laguna Formation is tapped by domestic, irrigation, and industrial wells throughout the area. Most wells, however, do not draw all their water from this formation, but are perforated or gravel packed so that they may also receive part of their yield from the underlying Mehrten and overlying Victor Formations. Due to the heterogenity of the deposits of the Laguna Formation, it is difficult to predict the yields of wells in different parts of the area. As reported in U. S. Geological Survey Water Supply Paper No. 1497, yields of 1,500 gpm or more are not uncommon from the more permeable beds. The highest yield reported was from a well slightly west of the area of investigation, perforated in Laguna sediments only. This well had a specific capacity (gpm per foot of drawdown) of 53.6, with a yield factor of 21 for the total saturated thickness, and 357 for the perforated aquifer only. This well was drilled by cable tool methods, cased to 300 feet, and perforated in the interval between 277-290 feet below land surface in a coarse gravel zone. The tabulation below gives the average depths, gpm, and other values of the 21 wells within the area of investigation that derive water from the Laguna only, or have a major part of the perforated zone within the Laguna Formation.

Well Depth	339 feet
GPM	898
Specific Capacity	35
Yield Factor (saturated thickness)	16
Yield Factor (aquifer only)	93

Most of these wells produce from coarse sands and gravels at depths of more than 250 feet. From west to east across the area of investigation, the Laguna thins and becomes progressively less important as a water-bearing unit.

Recharge to the Laguna Formation is probably effected through three major means. The first is by means of recharge from the American River, where the coarse sediments lie below the river bottom and its related gravels. The second is by direct percolation of rainfall throughout the area; though light, a significant proportion penetrates the permeable dredge tailings overlying much of the outcrop area. The third is by waste water from the now defunct dredging operations within the area of investigation which was allowed to percolate to the ground water body.

Victor Formation. The Victor Formation covers the western part of the area of investigation and extends in a tongue-like deposit south of the American River toward the foothills. During the periods of erosion and terracing of the Laguna Formation, Victor sediments were being deposited near the axis of the valley. With a rise in base level, these sediments began building up and spreading eastward toward the present Victor-Laguna contact line, choking the erosional trenches cut into the Laguna and older formations. When the Victor plain had reached its present form, a minor decrease in base level forced the rivers to entrench themselves into their present channels, where they have deposited the Recent flood plain deposits. Only minor dissection of the Victor plain has taken place since its deposition; the shallow channels cut into the nearly level plain give mute witness to the youth of the sediments.

The Victor Formation dips very slightly toward the west, with the present topographic surface closely approximating its subsurface dip. Due to its position overlying the Laguna and Mehrten Formation and its near lack of dip, it truncates both these formations as it follows upstream in the lowlands bordering the American River. This puts it in continuity with water-bearing strata of both formations in that portion of its outcrop area. Within the western part of the area, though, it is separated from the deeper water-bearing zones by fine grained Laguna deposits.

The Victor Formation consists for the most part of coarser material than does the Laguna Formation. Sands and gravels are prominent with interbedded clayey silts and sandy clays. From a study of well logs, it would appear that nearly the whole portion of the area covered by the Victor Formation contains a shallow sand and gravel layer which is either at the surface or within 30 feet of the surface and ranges in thickness from 10 to 50 feet. This layer is not of particular importance as an aquifer because the water table in general intercepts only the lower portion of it, but as a means of recharge from irrigation, rainfall, or the river or river gravels, it is quite important. The top of this gravel is generally less than 10 feet deep to the east of a line along Bradshaw Avenue, deepening toward the west. It may be that this gravel layer constitutes the base of the Victor Formation, lying as it does upon finer grained sediments which are indicative of the Laguna Formation, and indicating a period of renewed uplift and erosion. If such is the case, then the Victor Formation would have a maximum thickness in this area of less than 100 feet and would average about 50 feet thick.

The Victor Formation is made up of sediments similar to those of the Laguna Formation. The sands and gravels are derived chiefly from granitic and metamorphic rocks of the Sierras and from reworked Laguna sediments. In driller's logs, these are chiefly referred to as brown and yellow-brown in color, loose to caving sands, with buried hardpan zones. Seldom are the gravels in the Victor referred to as cemented, or clay and gravel, as the Laguna gravels frequently are. The reddish clays commonly described by drillers in this area are nearly all found in the Laguna section, with yellow-brown clays predominating in Victor sediments. Bluish-colored sediments are very seldom reported in Victor sediments within this area as it appears to be at the eastern edge of the flood basin or lake depositional environment. Blue colored sediments that are found in the area if investigation may be within the Ione Formation, the Mehrten Formation, or the lower part of the Laguna Formation, depending upon where the well is located.

Of the three major water-bearing formations, the Victor is probably the most permeable. It is seldom that any well drilled in the Victor plain will not penetrate some well-sorted sand or gravel deposits, and nearly all domestic wells draw at least part of their yield from this formation. Unfortunately, its thickness is limited, and in areas where only the lower part is saturated, it is necessary to drill deeper wells into the Laguna and Mehrten Formations. Most irrigation and other high capacity wells do this and, as previously stated, draw from one or more formational units. As pumping tests and other capacity tests are not usually performed by the utility companies on small domestic wells, it is difficult to find data that are applicable only to the Victor Formation. An indication of the well characteristics of the formation may be seen, however, from the following tabulation giving averages from eight shallow wells which probably penetrate through the Victor into the upper part of the Laguna.

Well Depth	204 feet
GPM	659
Specific Capacity	58
Yield Factor (saturated thickness)	40
Yield Factor (aquifer sands only)	225

These values represent an increase over the corresponding figures for the Laguna and the Mehrten Formations. The increase in amount of coarse grained material is also reflected in the higher average specific yields for the depth interval representing the Victor Formation.

Recharge to the Victor Formation is effected in much the same manner as to the Laguna Formation. The most important factors are inflow from the American River, irrigation return water, and rainfall penetration.

Stream Deposits

Stream deposits consist of Recent sands, gravels, and minor amounts of clay in the lowlands bordering the American River along the northern border of the area. These occupy, at present, two depositional environments: the low stream channels and the slightly more elevated flood plains.

The low water channels are floored with relatively coarse grained sands and gravels which, during times of high water, are shifting and moving downstream. In areas where the water table is in contact with water in the streambed, there is direct hydraulic continuity of the stream with the water table through these coarse deposits.

The elevation of the surface of the adjacent flood plain deposits is slightly higher than the stream channel and somewhat lower than the surface of the older Victor and Laguna deposits. These flood plain deposits have been built up by the deposition of finer material such as sands and silts, during times of flood in slack high water areas. This smaller grain size is accompanied by a reduction in permeability, though in general the flood plain deposits are good water producing areas. This is in part due to underlying coarse stream channel deposits left as the stream has shifted its course in the past. An insufficient number of wells were found penetrating the flood plain deposits to determine their average well characteristics.

Dredge Tailings

Scattered over the surface of the eastern part of the area are large piles of gold dredger tailings. These are primarily derived from the Laguna and Victor Formations, though some of the Recent stream gravels have been worked. The tailings have a maximum thickness of about 100 feet and probably average about 50 feet. In areas where the Mehrten Formation is at shallow depth, it was customary to use that formation as marker of the base of the gold-bearing materials.

In the action of dredging, the normal structure of the dredged interval is destroyed completely, along with the vertical and horizontal continuity of water-bearing strata. In dredging, the fine waste material from the dredge is dumped into the pond immediately behind the dredge and the coarse material, by means of a conveyor system, some distance behind. This allows the clays and silts to coat the bottom of the pond and leaves the coarse cobbles exposed at the surface. This leads to occasional inaccurate estimates of the permeability of the overall deposits. The permeability is further decreased by silts and clays resulting from dirty water pumped into low areas in the tailings. Ground water is often perched on the layers of fines, making water levels within the tailings fluctuate widely. Wells drilled through the tailings to the underlying water-bearing strata reflect the levels of the regional ground water body.

The dredge tailings are important in that they are a large scale infiltration area and have been receiving imported water while the dredging operation has been in progress.

Rainfall received by the dredged areas can percolate through the coarse upper gravels immediately in most areas and thus be removed from the zone of evaporation. Water received in this manner can then slowly percolate through the finer underlying strata to reach the regional water table.

APPENDIX B

TABLES OF ESTIMATED SPECIFIC YIELD BY SECTIONS AND ESTIMATED GROUND WATER STORAGE CAPACITY BY SECTIONS

TABLE B-1

ESTIMATED SPECIFIC YIELD BY SECTIONS

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range MDB&M	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300
8N/6E	1	1	1-7	1-5	1-5	1-4	1-7	1-3	1-4	1-7	•-10	•-10	•-9	•-3	•-5	•-3	•-4
	2	1	1-5	1-4	1-9	1-5	1-6	1-10	1-10	1-10	1-10	1-10	1-9	1-3	1-5	1-3	1-4
	3	9	9-14	9-19	9-6	9-8	8-7	7-15	7-15	7-4	7-4	7-4	7-4	6-4	6-4	5-4	5-3
	4	6	4-13	5-12	5-9	6-11	5-8	5-7	4-5	2-19	[illegible]	1-3	1-3	1-5	1-5	1-9	•-4
	5	6	6-15	6-14	6-15	6-14	6-8	6-11	5-8	•-15	•-15	•-5	•-5	•-5	•-5	•-5	•-5
	6	4	4-5	4-9	4-13	4-10	4-11	3-9	2-10	2-12	•-11	•-8	•-7	•-5	•-5	•-5	•-5
	7	1	1-14	1-14	1-9	1-13	1-3	1-7	1-3	1-4	•-5	•-10	•-10	•-5	•-5	•-5	•-5
	8	3	3-15	3-11	3-10	3-10	2-8	1-6	•-5	•-5	•-5	•-10	•-10	•-5	•-5	•-5	•-5
	9	2	2-16	2-23	2-10	2-6	2-10	2-7	2-5	1-5	1-5	1-23	1-12	1-3	1-3	1-3	1-4
	10	0	•-15	•-19	•-8	•-5	•-7	•-6	•-6	•-4	•-4	•-5	•-6	•-4	•-3	•-6	•-5
	11	2	2-15	2-13	2-4	2-4	2-5	2-6	2-6	2-4	2-3	2-5	2-5	2-4	2-3	2-11	2-12
	12	0	•-10	•-15	•-9	•-4	•-7	•-5	•-4	•-5	•-7	•-9	•-15	•-14	•-3	•-7	•-7
	13	2	2-9	2-18	2-19	1-3	1-10	1-5	1-4	1-5	1-12	1-13	1-25	1-24	•-3	•-7	•-7
	14	4	4-10	4-6	4-5	4-4	4-7	4-7	4-6	4-4	4-4	4-3	4-3	4-4	4-3	4-3	4-6
	15	0	•-11	•-11	•-4	•-6	•-5	•-6	•-5	•-4	•-4	•-3	•-3	•-4	•-3	•-3	•-6
	16	3	3-13	3-11	3-4	3-7	1-3	1-5	1-3	•-5	•-15	•-21	•-18	•-15	•-4	•-4	•-4
	17	9	8-17	8-8	8-10	8-14	7-13	7-10	3-7	3-14	2-20	2-20	2-23	2-21	2-4	2-4	2-4
	18	6	5-7	6-16	6-14	6-12	5-10	5-5	5-5	5-6	3-9	3-6	3-12	3-16	2-15	1-3	1-3
	19	26	21-9	21-24	21-16	22-10	21-9	20-8	14-7	7-5	4-5	4-6	4-6	3-5	1-3	1-3	1-9
	20	10	10-10	10-25	10-13	10-10	10-8	6-9	5-6	3-5	2-4	2-5	1-6	•-4	•-3	•-4	•-5
	21	1	1-14	1-25	1-5	1-10	1-8	•-9	•-6	•-5	•-4	•-5	•-6	•-4	•-3	•-4	•-5
	22	0	•-10	•-7	•-8	•-7	•-6	•-4	•-4	•-8	•-7	•-8	•-5	•-3	•-3	•-5	•-4
	23	0	•-10	•-7	•-8	•-7	•-6	•-4	•-4	•-8	•-7	•-8	•-5	•-3	•-3	•-5	•-4

Township and range MDB&M	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			300-320	320-340	340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600
8N/6E	1	1	•-5	•-6	•-9	•-5	•-10	•-7	•-18	•-10	•-7	•-9	•-5	•-5	•-5	•-5	•-5
	2	1	1-5	1-6	1-9	1-5	1-10	1-7	1-18	1-10	1-7	1-9	•-5	•-5	•-5	•-5	•-5
	3	9	5-3	4-5	4-7	3-5	3-5	3-9	3-14	2-4	2-9	2-9	1-5	•-5	•-5	•-5	•-5
	4	6	•-3	•-3	•-3	•-4	•-6	•-10	•-16	•-11	•-10	•-8	•-7	•-7	•-7	•-7	•-7
	5	6	•-5	•-6	•-7	•-5	•-6	•-10	•-15	•-10	•-10	•-8	•-7	•-7	•-7	•-7	•-7
	6	4	•-5	•-6	•-6	•-5	•-6	•-8	•-15	•-12	•-10	•-8	•-8	•-7	•-7	•-7	•-7
	7	1	•-5	•-5	•-5	•-5	•-7	•-5	•-15	•-15	•-10	•-8	•-10	•-8	•-8	•-8	•-8
	8	3	•-5	•-5	•-5	•-5	•-7	•-5	•-15	•-15	•-10	•-8	•-10	•-8	•-8	•-8	•-8
	9	2	1-3	1-3	1-3	1-3	1-7	1-3	•-20	•-20	•-10	•-8	•-10	•-8	•-8	•-3	•-3
	10	0	•-9	•-5	•-9	•-12	•-11	•-11	•-21	•-20	•-11	•-8	•-11	•-8	•-8	•-3	•-3
	11	2	2-9	2-5	2-9	2-12	2-11	2-11	2-21	2-20	2-11	2-8	2-11	1-8	1-8	1-3	•-3
	12	0	•-7	•-7	•-10	•-12	•-15	•-12	•-17	•-15	•-12	•-10	•-10	•-10	•-10	•-10	•-10
	13	2	•-7	•-7	•-10	•-12	•-15	•-12	•-17	•-15	•-12	•-10	•-10	•-10	•-10	•-10	•-10
	14	4	4-6	4-11	4-10	4-12	4-17	2-13	2-15	2-8	2-14	2-13	•-10	•-10	•-10	•-10	•-10
	15	0	•-6	•-11	•-10	•-12	•-17	•-13	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	16	3	•-6	•-6	•-6	•-6	•-11	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	17	9	•-6	•-7	•-7	•-7	•-10	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	18	6	1-7	1-10	•-7	•-7	•-10	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	19	26	1-7	•-7	•-7	•-7	•-10	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	20	10	•-5	•-5	•-5	•-5	•-10	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	21	1	•-5	•-5	•-5	•-5	•-10	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	22	0	•-3	•-6	•-5	•-5	•-14	•-12	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	23	0	•-3	•-6	•-5	•-5	•-14	•-12	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8

• Value of specific yield estimated from nearest wells

TABLE B-1 (Cont.)
ESTIMATED SPECIFIC YIELD BY SECTIONS
FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300
8N/6E	24	0	•-10	•-7	•-4	•-7	•-6	•-4	•-4	•-7	•-7	•-10	•-5	•-3	•-3	•-5	•-4
	25	3	3-13	3-10	3-3	3-5	3-4	3-5	2-3	2-6	2-4	2-12	1-5	•-3	•-3	•-5	•-4
	26	2	2-7	2-5	2-13	2-9	2-9	2-4	2-5	2-12	2-11	1-4	1-6	1-3	1-3	1-5	1-4
	27	3	3-7	3-8	3-8	3-10	3-8	3-4	3-7	1-5	1-4	1-5	1-3	1-5	1-6	1-3	1-3
	28	5	5-12	5-12	5-4	5-8	5-9	5-6	5-5	4-7	3-7	3-7	3-15	3-18	3-12	3-5	3-4
	29	3	3-10	3-22	3-14	3-12	3-11	2-3	1-4	1-5	1-3	1-4	1-3	1-7	•-10	•-5	•-5
	30	6	6-5	6-17	6-7	6-5	5-8	5-6	3-10	1-6	•-5	•-5	•-5	•-5	•-10	•-5	•-5
	31	14	14-7	14-15	14-10	14-10	14-8	11-5	8-6	5-5	1-3	1-3	1-3	•-5	•-10	•-5	•-5
	32	2	2-7	2-25	2-21	2-15	2-5	2-4	2-8	1-10	1-4	1-4	1-3	1-4	•-6	•-5	•-5
	33	0	•-6	•-15	•-15	•-17	•-7	•-4	•-7	•-7	•-4	•-4	•-3	•-4	•-5	•-5	•-5
	34	0	•-4	•-10	•-10	•-17	•-7	•-4	•-5	•-7	•-4	•-4	•-3	•-4	•-5	•-5	•-5
	35	0	•-4	•-7	•-7	•-17	•-7	•-3	•-4	•-5	•-4	•-3	•-3	•-4	•-5	•-5	•-4
	36	1	1-3	1-3	1-3	1-23	1-10	1-3	1-4	1-3	1-4	1-3	1-3	•-4	•-5	•-5	•-4
8N/7E	1	0	•-9	•-5	•-5	•-5	•-5	•-3	•-3	•-10	•-5	•-5	•-5	•-5	•-4	•-5	•-4
	2	1	1-9	1-5	1-5	1-5	1-5	1-3	1-3	1-10	1-5	1-5	1-5	1-5	1-4	1-5	1-4
	3	0	•-10	•-8	•-10	•-8	•-6	•-4	•-3	•-10	•-5	•-5	•-5	•-5	•-4	•-5	•-4
	4	0	•-12	•-10	•-15	•-12	•-6	•-4	•-4	•-8	•-5	•-5	•-5	•-5	•-4	•-5	•-4
	5	5	5-18	5-23	5-24	5-18	4-6	1-6	•-6	•-6	•-6	•-5	•-5	•-8	•-6	•-6	•-4
	6	0	•-15	•-18	•-24	•-15	•-8	•-6	•-6	•-6	•-6	•-4	•-4	•-8	•-8	•-8	•-4
	7	0	•-12	•-18	•-24	•-15	•-8	•-6	•-6	•-8	•-8	•-4	•-4	•-10	•-8	•-10	•-4
	8	5	5-11	5-13	5-20	4-11	4-9	2-8	1-15	1-7	1-11	1-18	1-9	1-19	1-7	1-7	1-10
	9	2	2-9	2-9	2-5	2-7	2-11	2-8	2-9	2-14	2-9	2-3	2-4	2-19	2-15	2-21	1-4

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			300-320	320-340	340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600
8N/6E	24	0	•-3	•-6	•-5	•-5	•-14	•-12	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	25	3	•-3	•-6	•-5	•-5	•-14	•-12	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	26	2	1-3	1-6	1-5	1-5	1-14	1-12	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	27	3	1-9	1-5	1-5	1-8	1-5	1-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	28	5	3-5	•-5	•-5	•-8	•-5	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	29	3	•-5	•-5	•-5	•-8	•-5	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	30	6	•-5	•-5	•-5	•-8	•-5	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	31	14	•-5	•-5	•-5	•-8	•-5	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	32	2	•-5	•-5	•-5	•-8	•-5	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	33	0	•-5	•-5	•-5	•-8	•-5	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	34	0	•-5	•-5	•-5	•-8	•-5	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	35	0	•-5	•-5	•-5	•-8	•-5	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	36	1	•-5	•-5	•-5	•-8	•-5	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
8N/7E	1	0	•-5	•-5	•-5	•-14	•-10	•-10	•-5	•-3	•-3	•-3	•-3	•-4	•-3	•-3	•-3
	2	1	1-5	1-5	1-5	1-14	1-10	1-10	1-5	1-3	1-3	1-3	1-3	1-4	1-3	1-3	1-3
	3	0	•-6	•-5	•-5	•-12	•-10	•-10	•-5	•-3	•-3	•-3	•-3	•-4	•-3	•-3	•-3
	4	0	•-6	•-5	•-5	•-10	•-10	•-10	•-5	•-3	•-3	•-3	•-3	•-4	•-3	•-3	•-5
	5	5	•-6	•-6	•-5	•-7	•-7	•-8	•-5	•-3	•-3	•-3	•-3	•-4	•-3	•-5	•-5
	6	0	•-6	•-6	•-5	•-6	•-6	•-6	•-5	•-3	•-3	•-3	•-3	•-4	•-5	•-5	•-5
	7	0	•-6	•-6	•-5	•-5	•-5	•-6	•-5	•-3	•-3	•-3	•-3	•-5	•-5	•-5	•-5
	8	5	1-5	1-6	1-5	1-5	1-22	1-10	1-10	1-5	1-10	•-5	•-5	•-5	•-5	•-5	•-5
	9	2	1-7	•-7	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-6

• Value of specific yield estimated from nearest wells

TABLE B-1 (Cont.)
ESTIMATED SPECIFIC YIELD BY SECTIONS
FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300
8N/7E	10	0	•-8	•-8	•-5	•-7	•-8	•-8	•-8	•-10	•-9	•-4	•-4	•-15	•-15	•-17	•-4
	11	0	•-8	•-8	•-8	•-7	•-8	•-7	•-8	•-8	•-10	•-7	•-8	•-10	•-15	•-12	•-5
	12	0	•-6	•-6	•-8	•-7	•-6	•-6	•-8	•-8	•-10	•-10	•-10	•-12	•-15	•-10	•-5
	13	0	•-5	•-5	•-10	•-7	•-5	•-5	•-8	•-7	•-11	•-15	•-15	•-15	•-15	•-10	•-4
	14	1	1-5	1-5	1-12	1-7	1-5	1-5	1-8	1-7	1-11	1-23	•-20	•-17	•-15	•-10	•-4
	15	0	•-5	•-5	•-12	•-10	•-7	•-7	•-8	•-6	•-8	•-19	•-18	•-17	•-15	•-8	•-5
	16	0	•-5	•-5	•-15	•-10	•-12	•-8	•-6	•-6	•-7	•-18	•-22	•-22	•-15	•-5	•-5
	17	1	1-5	1-4	1-25	1-13	1-12	1-10	1-5	1-5	1-5	1-17	1-25	1-25	1-15	1-5	1-5
	18	1	1-5	1-17	1-11	1-7	1-24	1-6	1-3	1-4	1-5	1-6	1-3	1-19	1-8	1-4	1-5
	19	0	•-5	•-15	•-10	•-6	•-24	•-8	•-5	•-6	•-5	•-8	•-6	•-15	•-8	•-4	•-5
	20	0	•-5	•-10	•-8	•-6	•-10	•-8	•-5	•-8	•-10	•-10	•-10	•-12	•-8	•-4	•-6
	21	0	•-6	•-8	•-6	•-5	•-9	•-10	•-5	•-10	•-15	•-12	•-12	•-12	•-9	•-6	•-8
	22	1	1-6	1-5	1-5	1-5	1-9	1-13	1-7	1-13	1-20	1-13	•-12	•-10	•-9	•-8	•-8
	23	0	•-8	•-5	•-5	•-5	•-8	•-10	•-6	•-8	•-18	•-12	•-10	•-10	•-10	•-8	•-10
	27	0	•-10	•-10	•-6	•-10	•-8	•-5	•-8	•-8	•-10	•-10	•-8	•-8	•-10	•-6	•-8
	28	0	•-10	•-15	•-8	•-8	•-10	•-8	•-10	•-10	•-12	•-12	•-7	•-7	•-10	•-6	•-6
	29	1	1-11	1-20	1-10	1-8	1-13	1-10	•-12	•-12	•-12	•-12	•-7	•-7	•-10	•-5	•-6
	30	1	1-5	1-5	1-5	1-5	1-5	1-23	1-12	1-16	1-15	1-13	1-5	1-7	1-11	1-5	1-5
	31	0	•-5	•-10	•-12	•-5	•-6	•-15	•-8	•-10	•-9	•-8	•-4	•-7	•-11	•-8	•-5
	32	1	1-3	1-25	1-21	1-3	1-7	1-3	1-3	1-3	1-3	1-3	1-3	•-7	•-11	•-10	•-6
	33	0	•-4	•-15	•-12	•-4	•-7	•-4	•-8	•-4	•-5	•-8	•-4	•-8	•-12	•-15	•-7

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			300-320	320-340	340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600
8N/7E	10	0	•-6	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	11	0	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	12	0	•-6	•-6	•-5	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	13	0	•-6	•-6	•-5	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	14	1	•-6	•-6	•-4	•-4	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	15	0	•-5	•-8	•-4	•-3	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	16	0	•-5	•-10	•-3	•-3	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	17	1	1-5	•-15	•-3	•-3	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	18	1	1-13	1-23	1-3	1-3	1-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	19	0	•-12	•-20	•-3	•-3	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	20	0	•-10	•-15	•-5	•-5	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	21	0	•-8	•-8	•-7	•-7	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	22	1	•-8	•-9	•-7	•-7	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	23	0	•-10	•-10	•-8	•-6	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	27	0	•-8	•-7	•-7	•-7	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	28	0	•-6	•-6	•-7	•-7	•-5	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	29	1	•-6	•-6	•-7	•-7	•-5	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	30	1	1-5	1-5	1-7	1-7	1-5	1-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	31	0	•-5	•-5	•-7	•-7	•-5	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	32	1	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	33	0	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5

• Value of specific yield estimated from nearest wells

TABLE B-1 (Cont.)

ESTIMATED SPECIFIC YIELD BY SECTIONS

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300
9N/6E	13	0	*-20	*-15	*-10	*-7	*-5	*-6	*-3	*-4	*-3	*-4	*-3	*-15	*-15	*-7	*-5
	22	0	*-20	*-15	*-10	*-7	*-5	*-6	*-3	*-4	*-3	*-4	*-3	*-15	*-15	*-7	*-5
	23	0	*-20	*-15	*-10	*-7	*-5	*-6	*-3	*-4	*-3	*-4	*-3	*-15	*-15	*-7	*-5
	24	3	3-21	3-12	3-10	3-6	3-5	3-7	2-3	1-3	1-3	1-3	1-3	1-15	1-18	1-7	1-5
	25	6	6-22	6-18	6-12	6-8	6-5	5-4	4-3	4-6	3-8	3-5	3-13	2-15	2-14	2-8	2-5
	26	3	3-15	3-9	3-7	3-15	3-10	3-4	3-8	3-4	3-8	3-8	3-8	3-7	3-9	3-3	3-3
	27	2	2-18	2-15	2-15	2-15	2-10	2-3	1-3	1-3	1-3	1-5	1-5	1-3	1-3	1-3	1-3
	28	0	*-18	*-15	*-15	*-15	*-10	*-3	*-3	*-3	*-3	*-5	*-5	*-3	*-3	*-3	*-3
	33	0	*-15	*-16	*-8	*-7	*-8	*-10	*-9	*-3	*-3	*-11	*-6	*-9	*-3	*-4	*-4
	34	9	8-15	8-16	9-8	9-7	9-8	6-10	4-9	4-3	4-3	4-11	4-6	4-9	3-3	3-4	3-4
	35	1	1-23	1-20	1-3	1-3	1-3	1-25	1-5	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3
	36	2	2-25	2-11	2-6	2-7	2-4	1-3	1-3	1-3	1-3	*-3	*-3	*-3	*-3	*-3	*-3
9N/7E	10	0	*-5	*-6	*-9	*-14	*-12	*-20	*-8	*-5	*-5	*-4					
	11	0	*-5	*-6	*-9	*-14	*-12	*-20	*-8	*-5	*-5	*-4					
	12	5	5-5	5-6	5-9	3-14	2-12	1-25	*-10	*-5	*-5	*-4					
	13	0	*-5	*-6	*-10	*-14	*-12	*-20	*-12	*-8	*-5	*-4					
	14	0	*-10	*-8	*-10	*-15	*-15	*-18	*-15	*-10	*-6	*-5					
	15	0	*-12	*-10	*-12	*-16	*-16	*-18	*-15	*-10	*-8	*-5					
	16	3	3-16	3-13	3-13	3-18	3-18	3-17	*-12	*-12	*-8	*-6					
	17	1	1-25	1-9	1-18	*-15	*-15	*-15	*-10	*-12	*-8	*-8	*-8	*-8	*-8	*-7	*-8
	18	2	2-23	2-22	2-15	2-12	2-8	2-14	2-7	2-17	2-9	2-8	2-9	2-8	2-8	2-7	2-10
	19	1	1-18	1-8	1-9	1-22	*-8	*-10	*-8	*-12	*-7	*-7	*-9	*-12	*-12	*-7	*-10

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			300-320	320-340	340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600
9N/6E	13	0	*-5	*-5	*-5	*-5	*-10	*-5	*-3	*-3	*-5	*-7	*-5	*-5	*-5	*-5	*-5
	22	0	*-5	*-5	*-5	*-5	*-10	*-5	*-3	*-3	*-5	*-7	*-5	*-5	*-5	*-5	*-5
	23	0	*-5	*-5	*-5	*-5	*-10	*-5	*-3	*-3	*-5	*-7	*-5	*-5	*-5	*-5	*-5
	24	3	1-5	1-5	1-5	1-8	1-18	1-3	1-3	1-3	1-5	1-9	*-5	*-5	*-5	*-5	*-5
	25	6	2-3	2-4	2-3	2-7	2-3	1-25	1-14	1-3	*-5	*-6	*-5	*-5	*-5	*-5	*-5
	26	3	3-3	3-4	3-4	3-4	3-5	2-4	2-4	2-4	1-5	1-5	1-5	1-5	*-5	*-5	*-5
	27	2	1-3	1-12	1-20	1-3	1-16	*-4	*-4	*-4	*-5	*-5	*-5	*-5	*-5	*-5	*-5
	28	0	*-3	*-12	*-20	*-3	*-16	*-4	*-4	*-4	*-5	*-5	*-5	*-5	*-5	*-5	*-5
	33	0	*-6	*-5	*-7	*-3	*-3	*-3	*-18	*-20	*-5	*-5	*-5	*-5	*-5	*-5	*-5
	34	9	2-6	2-5	2-7	1-3	1-3	1-3	1-18	1-20	*-5	*-5	*-5	*-5	*-5	*-5	*-5
	35	1	1-3	1-3	1-3	1-3	1-5	1-3	1-7	1-7	1-6	*-5	*-5	*-5	*-5	*-5	*-5
	36	2	*-3	*-3	*-3	*-3	*-5	*-3	*-7	*-7	*-6	*-5	*-5	*-5	*-5	*-5	*-5
9N/7E	10	0															
	11	0															
	12	5															
	13	0															
	14	0															
	15	0															
	16	3															
	17	1	*-8	*-10	*-10	*-6	*-10	*-10	*-10	*-10	*-12	*-10	*-8	*-6	*-5	*-4	*-4
	18	2	2-9	2-12	2-12	2-7	2-10	2-15	2-12	2-11	2-18	1-12	*-10	*-8	*-6	*-5	*-5
	19	1	*-10	*-12	*-12	*-7	*-10	*-10	*-10	*-10	*-15	*-10	*-8	*-5	*-5	*-5	*-5

* Value of specific yield estimated from nearest wells

TABLE B-1 (Cont.)

ESTIMATED SPECIFIC YIELD BY SECTIONS

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300
9N/7E	20	0	•-20	•-12	•-8	•-15	•-10	•-8	•-10	•-8	•-5	•-5	•-9	•-15	•-15	•-7	•-8
	21	1	1-25	1-17	1-6	1-5	1-14	1-5	1-11	1-5	1-5	1-5	1-9	1-23	1-24	1-6	1-7
	22	0	•-20	•-16	•-7	•-6	•-14	•-7	•-11	•-8	•-8	•-7	•-10	•-15	•-15	•-6	•-7
	23	1	1-17	1-19	1-7	•-6	•-15	•-10	•-12	•-10	•-10	•-10	•-10	•-10	•-10	•-5	•-6
	24	1	1-13	1-7	1-6	•-6	•-15	•-15	•-12	•-12	•-12	•-10					
	25	0	•-10	•-6	•-6	•-7	•-18	•-18	•-13	•-14	•-14	•-12					
	26	2	1-5	1-5	1-5	1-8	1-22	1-18	1-13	2-16	2-16	2-14	2-12	2-7	2-3	2-4	2-5
	27	0	•-5	•-6	•-10	•-8	•-15	•-12	•-10	•-10	•-10	•-8	•-8	•-6	•-4	•-4	•-5
	28	3	3-11	3-7	3-14	3-9	3-7	2-4	2-3	2-3	2-4	2-8	2-7	2-4	2-4	2-4	2-4
	29	1	1-5	1-9	1-9	•-9	•-7	•-5	•-4	•-4	•-4	•-8	•-7	•-6	•-4	•-4	•-5
	30	0	•-15	•-9	•-7	•-10	•-8	•-6	•-4	•-5	•-5	•-8	•-8	•-10	•-6	•-6	•-6
	31	1	1-25	1-9	1-5	•-12	•-8	•-6	•-5	•-7	•-6	•-8	•-8	•-12	•-4	•-8	•-8
	32	3	3-23	3-20	3-13	3-17	3-11	3-11	3-5	3-11	3-7	3-10	3-9	3-13	2-4	2-10	1-14
	33	2	2-19	2-18	2-11	2-5	2-4	•-13	•-7	•-9	•-7	•-7	•-7	•-12	•-8	•-10	•-12
	34	3	3-15	3-15	3-15	3-15	3-15	3-16	2-9	2-8	2-8	1-6	1-5	1-10	1-10	1-9	1-10
	35	0	•-10	•-12	•-14	•-18	•-15	•-15	•-12	•-10	•-10	•-10	•-10	•-10	•-10	•-8	•-9
	36	3	2-7	3-8	3-14	3-20	3-16	3-12	3-17	3-13	3-12	3-14	3-17	3-9	3-13	3-8	3-7

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			300-320	320-340	340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600
9N/7E	20	0	•-10	•-12	•-10	•-9	•-10	•-10	•-10	•-10	•-12	•-8					
	21	1	1-10	1-12	1-10	1-10	1-10										
	22	0															
	23	1															
	24	1															
	25	0															
	26	2															
	27	0	•-8	•-8	•-8	•-8	•-8										
	28	3	2-6	•-6	•-6	•-8	•-5										
	29	1	•-6	•-6	•-6	•-8	•-5	•-4	•-8	•-8	•-5	•-4					
	30	0	•-6	•-6	•-7	•-8	•-5	•-5	•-7	•-7	•-6	•-5	•-5	•-5	•-5	•-4	•-4
	31	1	•-8	•-8	•-8	•-8	•-5	•-5	•-7	•-7	•-6	•-6	•-5	•-5	•-4	•-4	•-4
	32	3	1-17	1-4	1-16	1-20	1-20	1-20	1-20	1-12	1-3	1-20	1-6	1-3	1-5	1-5	1-5
	33	2	•-10	•-10	•-9	•-9	•-5										
	34	3	•-10	•-10	•-10	•-10	•-4										
	35	0	•-10	•-10	•-10	•-10	•-4										
	36	3															

• Value of specific yield estimated from nearest wells

TABLE B-2
ESTIMATED GROUND WATER STORAGE CAPACITY BY SECTIONS
FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range MDB&M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet																
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300	300-320	320-340
8N/6E	1	640	896	640	640	512	896	384	512	896	•1280	•1280	•1152	•384	•640	•384	•512	•640	•768
	2	640	640	512	1152	640	768	1280	1280	1280	1280	1280	1152	384	640	384	512	640	768
	3	640	1792	2432	768	1024	896	1920	1920	512	512	512	512	512	512	512	384	384	640
	4	520	1352	1248	936	1144	832	728	520	1976	2496	312	312	520	520	936	•416	•312	•312
	5	350	1050	980	1050	980	560	770	560	•1050	•1050	•350	•350	•350	•350	•350	•350	•350	•420
	6	50	50	90	130	100	110	90	100	120	•100	•80	•70	•50	•50	•50	•50	•50	•60
	7	625	1750	1750	1125	1625	375	875	375	500	•625	•1250	•1250	•625	•625	•625	•625	•625	•625
	8	640	1920	1408	1280	1280	1024	768	•640	•640	•640	•1280	•1280	•640	•640	•640	•640	•640	•640
	9	640	2048	2944	1280	768	1280	896	640	640	640	2944	1536	384	384	384	512	384	384
	10	640	•1920	•2432	•1024	•640	•896	•768	•768	•512	•512	•640	•768	•512	•384	•768	•640	•1152	•640
	11	640	1920	1664	512	512	640	768	768	512	384	640	640	512	384	1408	1536	1152	640
	12	640	•1280	•1920	•1152	•512	•896	•640	•512	•640	•896	•1152	•1920	•1792	•384	•896	•896	•896	•896
	13	640	1152	2304	2432	384	1280	640	512	640	1536	1664	3200	3072	•384	•896	•896	•896	•896
	14	640	1280	768	640	512	896	896	768	512	512	384	384	512	384	384	768	768	1408
	15	640	•1408	•1408	•512	•768	•640	•768	•640	•512	•512	•384	•384	•512	•384	•384	•768	•768	•1408
	16	640	1664	1408	512	896	384	640	384	•640	•1920	•2688	•2304	•1920	•512	•512	•512	•768	•768
	17	640	2176	1024	1280	1792	1664	1280	896	1792	2560	2560	2944	2688	512	512	512	•768	•896
	18	640	896	2176	1792	1536	1280	640	640	768	1152	768	1536	2048	1920	384	384	896	1280
	19	640	1152	3072	2048	1280	1152	1024	896	640	640	768	768	640	384	384	1152	896	•896
	20	640	1280	3200	1664	1280	1024	1152	768	640	512	640	768	•512	•384	•512	•640	•640	•640
	21	640	1792	3200	640	1280	1024	•1152	•768	•640	•512	•640	•768	•512	•384	•512	•640	•640	•640
	22	640	•1280	•896	•1024	•896	•768	•512	•512	•1024	•896	•1024	•640	•384	•384	•640	•512	•384	•768
	23	640	•1280	•896	•1024	•896	•768	•512	•512	•1024	•896	•1024	•640	•384	•384	•640	•512	•384	•768

Township and range MDB&M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet													Depth to water table	Storage Capacity (acre-feet)		
			340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600		Above water table	Below water table	All zones
8N/6E	1	640	•1152	•640	•1280	•896	•2304	•1280	•896	•1152	•640	•640	•640	•640	•640	78	2586	22,630	25,216
	2	640	1152	640	1280	896	2304	1280	896	1152	•640	•640	•640	•640	•640	65	2464	24,160	26,624
	3	640	896	640	640	1152	1792	512	1152	1152	640	•640	•640	•640	•640	55	4800	22,080	26,880
	4	520	•312	•416	•624	•1040	•1664	•1144	•1040	•832	•728	•728	•728	•728	•728	45	2834	22,750	25,584
	5	350	•490	•350	•420	•700	•1050	•700	•700	•560	•490	•490	•490	•490	•490	40	2030	16,310	18,340
	6	50	•60	•50	•60	•80	•150	•120	•100	•80	•80	•70	•70	•70	•70	40	140	2,270	2,410
	7	625	•625	•625	•875	•625	•1875	•1875	•1250	•1000	•1250	•1000	•1000	•1000	•1000	43	3669	25,581	29,250
	8	640	•640	•640	•896	•640	•1920	•1920	•1280	•1024	•1280	•1024	•1024	•1024	•1024	45	3648	26,688	30,336
	9	640	384	384	896	384	•2560	•2560	•1280	•1024	•1280	•1024	•1024	•1024	•384	50	5632	26,624	32,256
	10	640	•1152	•1536	•1408	•1408	•2688	•2560	•1408	•1024	•1408	•1024	•1024	•1024	•384	55	5120	27,904	33,024
	11	640	1152	1536	1408	1408	2688	2560	1408	1024	1408	1024	1024	384	•384	60	4096	27,904	32,000
	12	640	•1280	•1536	•1920	•1536	•2176	•1920	•1536	•1280	•1280	•1280	•1280	•1280	•1280	85	5088	31,776	36,864
	13	640	•1280	•1536	•1920	•1536	•2176	•1920	•1536	•1280	•1280	•1280	•1280	•1280	•1280	90	6912	35,456	42,368
	14	640	1280	1536	2176	1664	1920	1024	1792	1664	•1280	•1280	•1280	•1280	•1280	75	3072	28,260	31,332
	15	640	•1280	•1536	•2176	•1664	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	57	3251	24,781	28,032
	16	640	•768	•768	•1408	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	58	3532	28,340	31,872
	17	640	•896	•896	•1280	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	60	4480	34,944	39,424
	18	640	•896	•896	•1280	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	55	4416	29,248	33,664
	19	640	•896	•896	•1280	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	68	6784	24,576	31,360
	20	640	•640	•640	•1280	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	65	6464	22,848	29,312
	21	640	•640	•640	•1280	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	60	5632	23,168	28,800
	22	640	•640	•640	•1792	•1536	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	65	3424	22,944	26,368
	23	640	•640	•640	•1792	•1536	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	90	4480	21,888	26,368

• Storage capacity from assumed specific yield

TABLE B-2 (Cont.)

ESTIMATED GROUND WATER STORAGE CAPACITY BY SECTIONS

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range MDB&M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet																
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300	300-320	320-340
8N/6E	24	640	*1280	*896	*512	*896	*768	*512	*512	*896	*896	*1280	*640	*384	*384	*640	*512	*384	*768
	25	640	1664	1280	384	640	512	640	384	768	512	1536	640	*384	*384	*640	*512	*384	*768
	26	640	896	640	1664	1152	1152	512	640	1536	1408	512	768	384	384	640	512	384	768
	27	640	896	1024	1024	1280	1024	512	896	640	512	640	384	640	768	384	384	1152	640
	28	640	1536	1536	512	1024	1152	768	640	896	896	896	1920	2304	1536	640	512	640	*640
	29	640	1280	2816	1792	1536	1408	384	512	640	384	512	384	896	*1280	*640	*640	*640	*640
	30	640	640	2176	896	640	1024	768	1280	768	*640	*640	*640	*640	*1280	*640	*640	*640	*640
	31	640	896	1920	1280	1280	1024	640	768	640	384	384	384	*640	*1280	*640	*640	*640	*640
	32	640	896	3200	2688	1920	640	512	1024	1280	512	512	384	512	*768	*640	*640	*640	*640
	33	640	*768	*1920	*1920	*2176	*896	*512	*896	*896	*512	*512	*384	*512	*640	*640	*640	*640	*640
	34	640	*512	*1280	*1280	*2176	*896	*512	*640	*896	*512	*512	*384	*512	*640	*640	*640	*640	*640
	35	640	*512	*896	*896	*2176	*896	*512	*512	*640	*512	*384	*384	*512	*640	*640	*512	*640	*640
	36	640	384	384	384	2944	1280	384	512	384	512	384	384	*512	*640	*640	*512	*640	*640
8N/7E	1	640	*1152	*640	*640	*640	*640	*384	*384	*1280	*640	*640	*640	*640	*512	*640	*512	*640	*640
	2	640	1152	640	640	640	640	384	384	1280	640	640	640	640	512	640	512	640	640
	3	640	*1280	*1024	*1280	*1024	*768	*512	*384	*1280	*640	*640	*640	*640	*512	*640	*512	*768	*640
	4	640	*1536	*1280	*1920	*1536	*768	*512	*512	*1024	*640	*640	*640	*640	*512	*640	*512	*768	*640
	5	640	2304	2944	3072	2304	768	768	*768	*768	*768	*640	*640	*1024	*768	*768	*512	*768	*768
	6	640	*1920	*2304	*3072	*1920	*1024	*768	*768	*768	*768	*512	*512	*1024	*1024	*1024	*512	*768	*768
	7	640	*1536	*2304	*3072	*1920	*1024	*768	*768	*1024	*1024	*512	*512	*1280	*1024	*1280	*512	*768	*768
	8	640	1408	1664	2560	1408	1152	1024	1920	896	1408	2304	1152	2432	896	896	1280	640	768
	9	640	1152	1152	640	896	1408	1024	896	1792	1152	384	512	2432	1920	2688	512	896	*896

Township and range MDB&M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet													Depth to water table	Storage Capacity (acre-feet)		
			340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600		Above water table	Below water table	All zones
8N/6E	24	640	*640	*640	*1792	*1536	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	100	4352	21,632	25,984
	25	640	*640	*640	*1792	*1536	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	105	4640	21,216	25,856
	26	640	640	640	1792	1536	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	100	5504	22,272	27,776
	27	640	640	1024	640	1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	75	3904	21,440	25,344
	28	640	*640	*1024	*640	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	65	3840	26,752	30,592
	29	640	*640	*1024	*640	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	68	6502	22,426	28,928
	30	640	*640	*1024	*640	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	73	4128	23,018	27,146
	31	640	*640	*1024	*640	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	75	5056	22,208	27,264
	32	640	*640	*1024	*640	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	75	8224	21,088	29,312
	33	640	*640	*1024	*640	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	80	6784	20,864	27,648
	34	640	*640	*1024	*640	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	87	5561	20,294	25,855
	35	640	*640	*1024	*640	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	102	5427	19,021	24,448
	36	640	*640	*1024	*640	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	*1024	100	5376	18,688	24,064
8N/7E	1	640	*640	*1792	*1280	*1280	*640	*384	*384	*384	*384	*512	*384	*384	*384	140	4480	15,616	20,096
	2	640	640	1792	1280	1280	640	384	384	384	384	512	384	384	384	130	4288	15,808	20,096
	3	640	*640	*1536	*1280	*1280	*640	*384	*384	*384	*384	*512	*384	*384	*384	120	5888	15,872	21,760
	4	640	*640	*1280	*1280	*1280	*640	*384	*384	*384	*384	*512	*384	*384	*640	80	6272	16,896	23,168
	5	640	*640	*896	*896	*1024	*640	*384	*384	*384	*384	*512	*384	*640	*640	70	9472	18,688	28,160
	6	640	*640	*768	*768	*768	*640	*384	*384	*384	*384	*512	*640	*640	*640	70	8256	18,752	27,008
	7	640	*640	*640	*640	*768	*640	*384	*384	*384	*384	*640	*640	*640	*640	80	8832	18,688	27,520
	8	640	640	640	2816	1280	1280	640	1280	*640	*640	*640	*640	*640	*640	70	6336	29,888	36,224
	9	640	*768	*640	*640	*640	*640	*640	*640	*640	*640	*640	*640	*640	*640	115	6016	22,784	28,800

* Storage capacity from assumed specific yield

TABLE B-2 (Cont.)
ESTIMATED GROUND WATER STORAGE CAPACITY BY SECTIONS
FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M D B&M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet																
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300	300-320	320-340
8N/7E	10	640	•1024	•1024	•640	•896	•1024	•1024	•1024	•1280	•1152	•512	•512	•1920	•1920	•2176	•512	•768	•768
	11	640	•1024	•1024	•640	•896	•1024	•896	•1024	•1024	•1280	•896	•1024	•1280	•1920	•1536	•640	•768	•768
	12	640	•768	•768	•1024	•896	•768	•768	•1024	•1024	•1280	•1280	•1280	•1536	•1920	•1280	•640	•768	•768
	13	320	•320	•320	•640	•448	•320	•320	•512	•448	•704	•960	•960	•960	•960	•640	•256	•384	•384
	14	640	640	640	1536	896	640	640	1024	896	1408	2944	•2560	•2176	•1920	•1280	•512	•768	•768
	15	640	•640	•640	•1536	•1280	•896	•896	•1024	•768	•1024	•2432	•2304	•2176	•1920	•1024	•640	•640	•1024
	16	640	•640	•640	•1920	•1280	•1280	•1024	•768	•768	•896	•2304	•2816	•2816	•1920	•640	•640	•640	•1280
	17	640	640	512	3200	1664	1536	1280	640	640	640	2176	3200	3200	1920	640	640	640	•1920
	18	640	640	2176	1408	896	3072	768	384	512	640	768	384	2432	1024	512	640	1664	2944
	19	640	•640	•1920	•1280	•768	•3072	•1024	•640	•768	•640	•1024	•768	•1920	•1024	•512	•640	•1536	•2560
	20	640	•640	•1280	•1024	•768	•1280	•1024	•640	•1024	•1280	•1280	•1280	•1536	•1024	•512	•768	•1280	•1920
	21	640	•768	•1024	•768	•640	•1152	•1280	•640	•1280	•1920	•1536	•1536	•1536	•1152	•768	•1024	•1024	•1024
	22	640	768	640	640	640	1152	1664	896	1664	2560	1664	•1536	•1280	•1152	•1024	•1024	•1024	•1152
	23	320	•512	•320	•320	•320	•512	•640	•384	•512	•1152	•768	•640	•640	•640	•512	•640	•640	•640
	27	320	•640	•640	•384	•640	•512	•320	•512	•512	•640	•640	•512	•512	•640	•384	•512	•512	•448
	28	640	•1280	•1920	•1024	•1024	•1280	•1024	•1280	•1280	•1536	•1536	•896	•896	•1280	•768	•768	•768	•768
	29	640	1408	2560	1280	1024	1664	1280	•1536	•1536	•1536	•1536	•896	•896	•1280	•640	•768	•768	•768
	30	640	640	640	640	640	640	2944	1536	2048	1920	1664	640	896	1408	640	640	640	640
	31	640	•640	•1280	•1536	•640	•768	•1920	•1024	•1280	•1152	•1024	•512	•896	•1408	•1024	•640	•640	•640
	32	640	384	3200	2688	384	896	384	384	384	384	384	384	•896	•1408	•1280	•768	•640	•640
	33	320	•256	•960	•768	•256	•448	•256	•512	•256	•320	•512	•256	•512	•768	•960	•448	•320	•320

Township and range M D B&M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet													Depth to water table	Storage Capacity (acre-feet)		
			340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600		Above water table	Below water table	All zones
8N/7E	10	640	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	130	6144	20,480	26,624
	11	640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	140	6528	19,456	25,984
	12	640	•640	•512	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	145	6272	19,712	25,984
	13	320	•320	•256	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	150	3104	10,528	13,632
	14	640	•512	•512	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	145	6240	23,328	29,568
	15	640	•512	•384	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	140	6912	21,632	28,544
	16	640	•384	•384	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	115	6528	23,808	30,336
	17	640	•384	•384	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	75	5600	27,452	33,052
	18	640	384	384	768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	90	6656	22,272	28,928
	19	640	•384	•384	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	95	6912	21,888	28,800
	20	640	•640	•640	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	75	3520	23,621	27,141
	21	640	•896	•896	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	115	5312	22,853	28,165
	22	640	•896	•896	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	143	6650	22,919	29,569
	23	320	•512	•384	•384	•384	•320	•320	•320	•320	•320	•320	•320	•320	•320	145	2624	11,200	13,824
	27	320	•448	•448	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	143	3725	9,651	13,376
	28	640	•896	•896	•640	•512	•640	•640	•640	•640	•640	•640	•640	•640	•640	115	7296	20,736	28,032
	29	640	•896	•896	•640	•512	•640	•640	•640	•640	•640	•640	•640	•640	•640	65	5504	23,040	28,544
	30	640	896	896	640	512	•640	•640	•640	•640	•640	•640	•640	•640	•640	85	2720	24,800	27,520
	31	640	•896	•896	•640	•512	•640	•640	•640	•640	•640	•640	•640	•640	•640	85	4288	21,440	25,728
	32	640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	70	6464	17,344	23,808
	33	320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	100	2688	9,600	12,288

• Storage capacity from assumed specific yield

TABLE B-1 (Cont.)

ESTIMATED SPECIFIC YIELD BY SECTIONS

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300
8N/7E	10	0	•-8	•-8	•-5	•-7	•-8	•-8	•-8	•-10	•-9	•-4	•-4	•-15	•-15	•-17	•-4
	11	0	•-8	•-8	•-8	•-7	•-8	•-7	•-8	•-8	•-10	•-7	•-8	•-10	•-15	•-12	•-5
	12	0	•-6	•-6	•-8	•-7	•-6	•-6	•-8	•-8	•-10	•-10	•-10	•-12	•-15	•-10	•-5
	13	0	•-5	•-5	•-10	•-7	•-5	•-5	•-8	•-7	•-11	•-15	•-15	•-15	•-15	•-10	•-4
	14	1	1-5	1-5	1-12	1-7	1-5	1-5	1-8	1-7	1-11	1-23	•-20	•-17	•-15	•-10	•-4
	15	0	•-5	•-5	•-12	•-10	•-7	•-7	•-8	•-6	•-8	•-19	•-18	•-17	•-15	•-8	•-5
	16	0	•-5	•-5	•-15	•-10	•-12	•-8	•-6	•-6	•-7	•-18	•-22	•-22	•-15	•-5	•-5
	17	1	1-5	1-4	1-25	1-13	1-12	1-10	1-5	1-5	1-5	1-17	1-25	1-25	1-15	1-5	1-5
	18	1	1-5	1-17	1-11	1-7	1-24	1-6	1-3	1-4	1-5	1-6	1-3	1-19	1-8	1-4	1-5
	19	0	•-5	•-15	•-10	•-6	•-24	•-8	•-5	•-6	•-5	•-8	•-6	•-15	•-8	•-4	•-5
	20	0	•-5	•-10	•-8	•-6	•-10	•-8	•-5	•-8	•-10	•-10	•-10	•-12	•-8	•-4	•-6
	21	0	•-6	•-8	•-6	•-5	•-9	•-10	•-5	•-10	•-15	•-12	•-12	•-12	•-9	•-6	•-8
	22	1	1-6	1-5	1-5	1-5	1-9	1-13	1-7	1-13	1-20	1-13	•-12	•-10	•-9	•-8	•-8
	23	0	•-8	•-5	•-5	•-5	•-8	•-10	•-6	•-8	•-18	•-12	•-10	•-10	•-10	•-8	•-10
	27	0	•-10	•-10	•-6	•-10	•-8	•-5	•-8	•-8	•-10	•-10	•-8	•-8	•-10	•-6	•-8
	28	0	•-10	•-15	•-8	•-8	•-10	•-8	•-10	•-10	•-12	•-12	•-7	•-7	•-10	•-6	•-6
	29	1	1-11	1-20	1-10	1-8	1-13	1-10	•-12	•-12	•-12	•-12	•-7	•-7	•-10	•-5	•-6
	30	1	1-5	1-5	1-5	1-5	1-5	1-23	1-12	1-16	1-15	1-13	1-5	1-7	1-11	1-5	1-5
	31	0	•-5	•-10	•-12	•-5	•-6	•-15	•-8	•-10	•-9	•-8	•-4	•-7	•-11	•-8	•-5
	32	1	1-3	1-25	1-21	1-3	1-7	1-3	1-3	1-3	1-3	1-3	1-3	•-7	•-11	•-10	•-6
	33	0	•-4	•-15	•-12	•-4	•-7	•-4	•-8	•-4	•-5	•-8	•-4	•-8	•-12	•-15	•-7

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			300-320	320-340	340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600
8N/7E	10	0	•-6	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	11	0	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	12	0	•-6	•-6	•-5	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	13	0	•-6	•-6	•-5	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	14	1	•-6	•-6	•-4	•-4	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	15	0	•-5	•-8	•-4	•-3	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	16	0	•-5	•-10	•-3	•-3	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	17	1	1-5	•-15	•-3	•-3	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	18	1	1-13	1-23	1-3	1-3	1-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	19	0	•-12	•-20	•-3	•-3	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	20	0	•-10	•-15	•-5	•-5	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	21	0	•-8	•-8	•-7	•-7	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	22	1	•-8	•-9	•-7	•-7	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	23	0	•-10	•-10	•-8	•-6	•-6	•-6	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	27	0	•-8	•-7	•-7	•-7	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	28	0	•-6	•-6	•-7	•-7	•-5	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	29	1	•-6	•-6	•-7	•-7	•-5	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	30	1	1-5	1-5	1-7	1-7	1-5	1-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	31	0	•-5	•-5	•-7	•-7	•-5	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	32	1	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	33	0	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5	•-5

• Value of specific yield estimated from nearest wells.

TABLE B-1 (Cont.)

ESTIMATED SPECIFIC YIELD BY SECTIONS

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

SACRAMENTO GROUND

Township and range M D B & M	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-260	280-300
9N/6E	13	0	•-20	•-15	•-10	•-7	•-5	•-6	•-3	•-4	•-3	•-4	•-3	•-15	•-15	•-7	•-5
	22	0	•-20	•-15	•-10	•-7	•-5	•-6	•-3	•-4	•-3	•-4	•-3	•-15	•-15	•-7	•-5
	23	0	•-20	•-15	•-10	•-7	•-5	•-6	•-3	•-4	•-3	•-4	•-3	•-15	•-15	•-7	•-5
	24	3	3-21	3-12	3-10	3-6	3-5	3-7	2-3	1-3	1-3	1-3	1-3	1-15	1-18	1-7	1-5
	25	6	6-22	6-18	6-12	6-8	6-5	5-4	4-3	4-6	3-8	3-5	3-13	2-15	2-14	2-8	2-5
	26	3	3-15	3-9	3-7	3-15	3-10	3-4	3-8	3-4	3-8	3-8	3-8	3-7	3-9	3-3	3-3
	27	2	2-18	2-15	2-15	2-15	2-10	2-3	1-3	1-3	1-3	1-5	1-5	1-3	1-3	1-3	1-3
	28	0	•-18	•-15	•-15	•-15	•-10	•-3	•-3	•-3	•-3	•-5	•-5	•-3	•-3	•-3	•-3
	33	0	•-15	•-16	•-8	•-7	•-8	•-10	•-9	•-3	•-3	•-11	•-6	•-9	•-3	•-4	•-4
	34	9	8-15	8-16	9-8	9-7	9-8	6-10	4-9	4-3	4-3	4-11	4-6	4-9	3-3	3-4	3-4
	35	1	1-23	1-20	1-3	1-3	1-3	1-25	1-5	1-3	1-3	1-3	1-3	1-3	1-3	1-3	1-3
	36	2	2-25	2-11	2-6	2-7	2-4	1-3	1-3	1-3	1-3	•-3	•-3	•-3	•-3	•-3	•-5
9N/7E	10	0	•-5	•-6	•-9	•-14	•-12	•-20	•-8	•-5	•-5	•-4					
	11	0	•-5	•-6	•-9	•-14	•-12	•-20	•-8	•-5	•-5	•-4					
	12	5	5-5	5-6	5-9	3-14	2-12	1-25	•-10	•-5	•-5	•-4					
	13	0	•-5	•-6	•-10	•-14	•-12	•-20	•-12	•-8	•-5	•-4					
	14	0	•-10	•-8	•-10	•-15	•-15	•-18	•-15	•-10	•-6	•-5					
	15	0	•-12	•-10	•-12	•-16	•-16	•-18	•-15	•-10	•-8	•-5					
	16	3	3-16	3-13	3-13	3-18	3-18	3-17	•-12	•-12	•-8	•-6					
	17	1	1-25	1-9	1-18	•-15	•-15	•-15	•-10	•-12	•-8	•-8	•-8	•-8	•-8	•-7	•-8
	18	2	2-23	2-22	2-15	2-12	2-8	2-14	2-7	2-17	2-9	2-8	2-9	2-8	2-8	2-7	2-10
	19	1	1-18	1-8	1-9	1-22	•-8	•-10	•-8	•-12	•-7	•-7	•-9	•-12	•-12	•-7	•-10

Township and range M D B & M	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			300-320	320-340	340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600
9N/6E	13	0	•-5	•-5	•-5	•-5	•-10	•-5	•-3	•-3	•-5	•-7	•-5	•-5	•-5	•-5	•-5
	22	0	•-5	•-5	•-5	•-5	•-10	•-5	•-3	•-3	•-5	•-7	•-5	•-5	•-5	•-5	•-5
	23	0	•-5	•-5	•-5	•-5	•-10	•-5	•-3	•-3	•-5	•-7	•-5	•-5	•-5	•-5	•-5
	24	3	1-5	1-5	1-5	1-8	1-18	1-3	1-3	1-3	1-5	1-9	•-5	•-5	•-5	•-5	•-5
	25	6	2-3	2-4	2-3	2-7	2-3	1-25	1-14	1-3	•-5	•-6	•-5	•-5	•-5	•-5	•-5
	26	3	3-3	3-4	3-4	3-4	3-5	2-4	2-4	2-4	1-5	1-5	1-5	1-5	•-5	•-5	•-5
	27	2	1-3	1-12	1-20	1-3	1-16	•-4	•-4	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	28	0	•-3	•-12	•-20	•-3	•-16	•-4	•-4	•-4	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	33	0	•-6	•-5	•-7	•-3	•-3	•-3	•-18	•-20	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	34	9	2-6	2-5	2-7	1-3	1-3	1-3	1-18	1-20	•-5	•-5	•-5	•-5	•-5	•-5	•-5
	35	1	1-3	1-3	1-3	1-3	1-5	1-3	1-7	1-7	1-6	•-5	•-5	•-5	•-5	•-5	•-5
	36	2	•-3	•-3	•-3	•-3	•-5	•-3	•-7	•-7	•-6	•-5	•-5	•-5	•-5	•-5	•-5
9N/7E	10	0															
	11	0															
	12	5															
	13	0															
	14	0															
	15	0															
	16	3															
	17	1	•-8	•-10	•-10	•-6	•-10	•-10	•-10	•-10	•-12	•-10	•-8	•-6	•-5	•-4	•-4
	18	2	2-9	2-12	2-12	2-7	2-10	2-15	2-12	2-11	2-18	1-12	•-10	•-8	•-6	•-5	•-5
	19	1	•-10	•-12	•-12	•-7	•-10	•-10	•-10	•-10	•-15	•-10	•-8	•-5	•-5	•-5	•-5

• Value of specific yield estimated from nearest wells

TABLE B-1
ESTIMATED SPECIFIC YIELD BY SECTIONS
FOLSOM–EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			0–20	20–40	40–60	60–80	80–100	100–120	120–140	140–160	160–180	180–200	200–220	220–240	240–260	260–280	280–300
8N/6E	1	1	1-7	1-5	1-5	1-4	1-7	1-3	1-4	1-7	•-10	•-10	•-9	•-3	•-5	•-3	•-4
	2	1	1-5	1-4	1-9	1-5	1-6	1-10	1-10	1-10	1-10	1-10	1-9	1-3	1-5	1-3	1-4
	3	9	9-14	9-19	9-6	9-8	8-7	7-15	7-15	7-4	7-4	7-4	7-4	6-4	6-4	5-4	5-3
	4	6	4-13	5-12	5-9	6-11	5-8	5-7	4-5	2-19	1-21	1-3	1-3	1-5	1-5	1-9	•-4
	5	6	6-15	6-14	6-15	6-14	6-8	6-11	5-8	•-15	•-15	•-5	•-5	•-5	•-5	•-5	•-5
	6	4	4-5	4-9	4-13	4-10	4-11	3-9	2-10	2-12	•-11	•-8	•-7	•-5	•-5	•-5	•-5
	7	1	1-14	1-14	1-9	1-13	1-3	1-7	1-3	1-4	•-5	•-10	•-10	•-5	•-5	•-5	•-5
	8	3	3-15	3-11	3-10	3-10	2-8	1-6	•-5	•-5	•-5	•-10	•-10	•-5	•-5	•-5	•-5
	9	2	2-16	2-23	2-10	2-6	2-10	2-7	2-5	1-5	1-5	1-23	1-12	1-3	1-3	1-3	1-4
	10	0	•-15	•-19	•-8	•-5	•-7	•-6	•-6	•-4	•-4	•-5	•-6	•-4	•-3	•-6	•-5
	11	2	2-15	2-13	2-4	2-4	2-5	2-6	2-6	2-4	2-3	2-5	2-5	2-4	2-3	2-11	2-12
	12	0	•-10	•-15	•-9	•-4	•-7	•-5	•-4	•-5	•-7	•-9	•-15	•-14	•-3	•-7	•-7
	13	2	2-9	2-18	2-19	1-3	1-10	1-5	1-4	1-5	1-12	1-13	1-25	1-24	•-3	•-7	•-7
	14	4	4-10	4-6	4-5	4-4	4-7	4-7	4-6	4-4	4-4	4-3	4-3	4-4	4-3	4-3	4-6
	15	0	•-11	•-11	•-4	•-6	•-5	•-6	•-5	•-4	•-4	•-3	•-3	•-4	•-3	•-3	•-6
	16	3	3-13	3-11	3-4	3-7	1-3	1-5	1-3	•-5	•-15	•-21	•-18	•-15	•-4	•-4	•-4
	17	9	8-17	8-8	8-10	8-14	7-13	7-10	3-7	3-14	2-20	2-20	2-23	2-21	2-4	2-4	2-4
	18	6	5-7	6-16	6-14	6-12	5-10	5-5	5-5	5-6	3-9	3-6	3-12	3-16	2-15	1-3	1-3
	19	26	21-9	21-24	21-16	22-10	21-9	20-8	14-7	7-5	4-5	4-6	4-6	3-5	1-3	1-3	1-9
	20	10	10-10	10-25	10-13	10-10	10-8	6-9	5-6	3-5	2-4	2-5	1-6	•-4	•-3	•-4	•-5
	21	1	1-14	1-25	1-5	1-10	1-8	•-9	•-6	•-5	•-4	•-5	•-6	•-4	•-3	•-4	•-5
	22	0	•-10	•-7	•-8	•-7	•-6	•-4	•-4	•-8	•-7	•-8	•-5	•-3	•-3	•-5	•-4
	23	0	•-10	•-7	•-8	•-7	•-6	•-4	•-4	•-8	•-7	•-8	•-5	•-3	•-3	•-5	•-4

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			300–320	320–340	340–360	360–380	380–400	400–420	420–440	440–460	460–480	480–500	500–520	520–540	540–560	560–580	580–600
8N/6E	1	1	•-5	•-6	•-9	•-5	•-10	•-7	•-18	•-10	•-7	•-9	•-5	•-5	•-5	•-5	•-5
	2	1	1-5	1-6	1-9	1-5	1-10	1-7	1-18	1-10	1-7	1-9	•-5	•-5	•-5	•-5	•-5
	3	9	5-3	4-5	4-7	3-5	3-5	3-9	3-14	2-4	2-9	2-9	1-5	•-5	•-5	•-5	•-5
	4	6	•-3	•-3	•-3	•-4	•-6	•-10	•-16	•-11	•-10	•-8	•-7	•-7	•-7	•-7	•-7
	5	6	•-5	•-6	•-7	•-5	•-6	•-10	•-15	•-10	•-10	•-8	•-7	•-7	•-7	•-7	•-7
	6	4	•-5	•-6	•-6	•-5	•-6	•-8	•-15	•-12	•-10	•-8	•-8	•-7	•-7	•-7	•-7
	7	1	•-5	•-5	•-5	•-5	•-7	•-5	•-15	•-15	•-10	•-8	•-10	•-8	•-8	•-8	•-8
	8	3	•-5	•-5	•-5	•-5	•-7	•-5	•-15	•-15	•-10	•-8	•-10	•-8	•-8	•-8	•-8
	9	2	1-3	1-3	1-3	1-3	1-7	1-3	•-20	•-20	•-10	•-8	•-10	•-8	•-8	•-3	•-3
	10	0	•-9	•-5	•-9	•-12	•-11	•-11	•-21	•-20	•-11	•-8	•-11	•-8	•-8	•-3	•-3
	11	2	2-9	2-5	2-9	2-12	2-11	2-11	2-21	2-20	2-11	2-8	2-11	1-8	1-8	1-3	•-3
	12	0	•-7	•-7	•-10	•-12	•-15	•-12	•-17	•-15	•-12	•-10	•-10	•-10	•-10	•-10	•-10
	13	2	•-7	•-7	•-10	•-12	•-15	•-12	•-17	•-15	•-12	•-10	•-10	•-10	•-10	•-10	•-10
	14	4	4-6	4-11	4-10	4-12	4-17	2-13	2-15	2-8	2-14	2-13	•-10	•-10	•-10	•-10	•-10
	15	0	•-6	•-11	•-10	•-12	•-17	•-13	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	16	3	•-6	•-6	•-6	•-6	•-11	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	17	9	•-6	•-7	•-7	•-7	•-10	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	18	6	1-7	1-10	•-7	•-7	•-10	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	19	26	1-7	•-7	•-7	•-7	•-10	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	20	10	•-5	•-5	•-5	•-5	•-10	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	21	1	•-5	•-5	•-5	•-5	•-10	•-10	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	22	0	•-3	•-6	•-5	•-5	•-14	•-12	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8
	23	0	•-3	•-6	•-5	•-5	•-14	•-12	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8	•-8

• Value of specific yield estimated from nearest wells

TABLE B-I (Cont.)
ESTIMATED SPECIFIC YIELD BY SECTIONS
FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300
8N/6E	24	0	*-10	*-7	*-4	*-7	*-6	*-4	*-4	*-7	*-7	*-10	*-5	*-3	*-3	*-5	*-4
	25	3	3-13	3-10	3-3	3-5	3-4	3-5	2-3	2-6	2-4	2-12	1-5	*-3	*-3	*-5	*-4
	26	2	2-7	2-5	2-13	2-9	2-9	2-4	2-5	2-12	2-11	1-4	1-6	1-3	1-3	1-5	1-4
	27	3	3-7	3-8	3-8	3-10	3-8	3-4	3-7	1-5	1-4	1-5	1-3	1-5	1-6	1-3	1-3
	28	5	5-12	5-12	5-4	5-8	5-9	5-6	5-5	4-7	3-7	3-7	3-15	3-18	3-12	3-5	3-4
	29	3	3-10	3-22	3-14	3-12	3-11	2-3	1-4	1-5	1-3	1-4	1-3	1-7	*-10	*-5	*-5
	30	6	6-5	6-17	6-7	6-5	5-8	5-6	3-10	1-6	*-5	*-5	*-5	*-5	*-10	*-5	*-5
	31	14	14-7	14-15	14-10	14-10	14-8	11-5	8-6	5-5	1-3	1-3	1-3	*-5	*-10	*-5	*-5
	32	2	2-7	2-25	2-21	2-15	2-5	2-4	2-8	1-10	1-4	1-4	1-3	1-4	*-6	*-5	*-5
	33	0	*-6	*-15	*-15	*-17	*-7	*-4	*-7	*-7	*-4	*-4	*-3	*-4	*-5	*-5	*-5
	34	0	*-4	*-10	*-10	*-17	*-7	*-4	*-5	*-7	*-4	*-4	*-3	*-4	*-5	*-5	*-5
	35	0	*-4	*-7	*-7	*-17	*-7	*-3	*-4	*-5	*-4	*-3	*-3	*-4	*-5	*-5	*-4
	36	1	1-3	1-3	1-3	1-23	1-10	1-3	1-4	1-3	1-4	1-3	1-3	*-4	*-5	*-5	*-4
8N/7E	1	0	*-9	*-5	*-5	*-5	*-5	*-3	*-3	*-10	*-5	*-5	*-5	*-5	*-4	*-5	*-4
	2	1	1-9	1-5	1-5	1-5	1-5	1-3	1-3	1-10	1-5	1-5	1-5	1-5	1-4	1-5	1-4
	3	0	*-10	*-8	*-10	*-8	*-6	*-4	*-3	*-10	*-5	*-5	*-5	*-5	*-4	*-5	*-4
	4	0	*-12	*-10	*-15	*-12	*-6	*-4	*-4	*-8	*-5	*-5	*-5	*-5	*-4	*-5	*-4
	5	5	5-18	5-23	5-24	5-18	4-6	1-6	*-6	*-6	*-6	*-5	*-5	*-8	*-6	*-6	*-4
	6	0	*-15	*-18	*-24	*-15	*-8	*-6	*-6	*-6	*-6	*-4	*-4	*-8	*-8	*-8	*-4
	7	0	*-12	*-18	*-24	*-15	*-8	*-6	*-6	*-8	*-8	*-4	*-4	*-10	*-8	*-10	*-4
	8	5	5-11	5-13	5-20	4-11	4-9	2-8	1-15	1-7	1-11	1-18	1-9	1-19	1-7	1-7	1-10
	9	2	2-9	2-9	2-5	2-7	2-11	2-8	2-9	2-14	2-9	2-3	2-4	2-19	2-15	2-21	1-4

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			300-320	320-340	340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600
8N/6E	24	0	*-3	*-6	*-5	*-5	*-14	*-12	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	25	3	*-3	*-6	*-5	*-5	*-14	*-12	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	26	2	1-3	1-6	1-5	1-5	1-14	1-12	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	27	3	1-9	1-5	1-5	1-8	1-5	1-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	28	5	3-5	*-5	*-5	*-8	*-5	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	29	3	*-5	*-5	*-5	*-8	*-5	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	30	6	*-5	*-5	*-5	*-8	*-5	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	31	14	*-5	*-5	*-5	*-8	*-5	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	32	2	*-5	*-5	*-5	*-8	*-5	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	33	0	*-5	*-5	*-5	*-8	*-5	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	34	0	*-5	*-5	*-5	*-8	*-5	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	35	0	*-5	*-5	*-5	*-8	*-5	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
	36	1	*-5	*-5	*-5	*-8	*-5	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8	*-8
8N/7E	1	0	*-5	*-5	*-5	*-14	*-10	*-10	*-5	*-3	*-3	*-3	*-3	*-4	*-3	*-3	*-3
	2	1	1-5	1-5	1-5	1-14	1-10	1-10	1-5	1-3	1-3	1-3	1-3	1-4	1-3	1-3	1-3
	3	0	*-6	*-5	*-5	*-12	*-10	*-10	*-5	*-3	*-3	*-3	*-3	*-4	*-3	*-3	*-3
	4	0	*-6	*-5	*-5	*-10	*-10	*-10	*-5	*-3	*-3	*-3	*-3	*-4	*-3	*-3	*-5
	5	5	*-6	*-6	*-5	*-7	*-7	*-8	*-5	*-3	*-3	*-3	*-3	*-4	*-3	*-5	*-5
	6	0	*-6	*-6	*-5	*-6	*-6	*-6	*-5	*-3	*-3	*-3	*-3	*-4	*-5	*-5	*-5
	7	0	*-6	*-6	*-5	*-5	*-5	*-6	*-5	*-3	*-3	*-3	*-3	*-5	*-5	*-5	*-5
	8	5	1-5	1-6	1-5	1-5	1-22	1-10	1-10	1-5	1-10	*-5	*-5	*-5	*-5	*-5	*-5
	9	2	1-7	*-7	*-6	*-5	*-5	*-5	*-5	*-5	*-5	*-5	*-5	*-5	*-5	*-5	*-5

* Value of specific yield estimated from nearest wells

APPENDIX B

TABLES OF ESTIMATED SPECIFIC YIELD BY SECTIONS AND ESTIMATED GROUND WATER STORAGE CAPACITY BY SECTIONS

from the zone of evaporation. Water received in this manner can then slowly percolate through the finer underlying strata to reach the regional water table.

TABLE B-2 (Cont.)
ESTIMATED GROUND WATER STORAGE CAPACITY BY SECTIONS
FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M D B&M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet																
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300	300-320	320-340
8N/6E	24	640	•1280	•896	•512	•896	•768	•512	•512	•896	•896	•1280	•640	•384	•384	•640	•512	•384	•768
	25	640	1664	1280	384	640	512	640	384	768	512	1536	640	•384	•384	•640	•512	•384	•768
	26	640	896	640	1664	1152	1152	512	640	1536	1408	512	768	384	384	640	512	384	768
	27	640	896	1024	1024	1280	1024	512	896	640	512	640	384	640	768	384	384	1152	640
	28	640	1536	1536	512	1024	1152	768	640	896	896	896	1920	2304	1536	640	512	640	•640
	29	640	1280	2816	1792	1536	1408	384	512	640	384	512	384	896	•1280	•640	•640	•640	•640
	30	640	640	2176	896	640	1024	768	1280	768	•640	•640	•640	•640	•1280	•640	•640	•640	•640
	31	640	896	1920	1280	1280	1024	640	768	640	384	384	384	•640	•1280	•640	•640	•640	•640
	32	640	896	3200	2688	1920	640	512	1024	1280	512	512	384	512	•768	•640	•640	•640	•640
	33	640	•768	•1920	•1920	•2176	•896	•512	•896	•896	•512	•512	•384	•512	•640	•640	•640	•640	•640
	34	640	•512	•1280	•1280	•2176	•896	•512	•640	•896	•512	•512	•384	•512	•640	•640	•640	•640	•640
	35	640	•512	•896	•896	•2176	•896	•512	•512	•640	•512	•384	•384	•512	•640	•640	•512	•640	•640
	36	640	384	384	384	2944	1280	384	512	384	512	384	384	•512	•640	•640	•512	•640	•640
8N/7E	1	640	•1152	•640	•640	•640	•640	•384	•384	•1280	•640	•640	•640	•640	•512	•640	•512	•640	•640
	2	640	1152	640	640	640	640	384	384	1280	640	640	640	640	512	640	512	640	640
	3	640	•1280	•1024	•1280	•1024	•768	•512	•384	•1280	•640	•640	•640	•640	•512	•640	•512	•768	•640
	4	640	•1536	•1280	•1920	•1536	•768	•512	•512	•1024	•640	•640	•640	•640	•512	•640	•512	•768	•640
	5	640	2304	2944	3072	2304	768	768	•768	•768	•768	•640	•640	•1024	•768	•768	•512	•768	•768
	6	640	•1920	•2304	•3072	•1920	•1024	•768	•768	•768	•768	•512	•512	•1024	•1024	•1024	•512	•768	•768
	7	640	•1536	•2304	•3072	•1920	•1024	•768	•768	•1024	•1024	•512	•512	•1280	•1024	•1280	•512	•768	•768
	8	640	1408	1664	2560	1408	1152	1024	1920	896	1408	2304	1152	2432	896	896	1280	640	768
	9	640	1152	1152	640	896	1408	1024	896	1792	1152	384	512	2432	1920	2688	512	896	•896

Township and range M D B&M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet													Depth to water table	Storage Capacity (acre-feet)		
			540-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600		Above water table	Below water table	All zones
8N/6E	24	640	•640	•640	•1792	•1536	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	100	4352	21,632	25,984
	25	640	•640	•640	•1792	•1536	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	105	4640	21,216	25,856
	26	640	640	640	1792	1536	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	100	5504	22,272	27,776
	27	640	640	1024	640	1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	75	3904	21,440	25,344
	28	640	•640	•1024	•640	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	65	3840	26,752	30,592
	29	640	•640	•1024	•640	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	68	6502	22,426	28,928
	30	640	•640	•1024	•640	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	73	4128	23,018	27,146
	31	640	•640	•1024	•640	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	75	5056	22,208	27,264
	32	640	•640	•1024	•640	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	75	8224	21,088	29,312
	33	640	•640	•1024	•640	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	80	6784	20,864	27,648
	34	640	•640	•1024	•640	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	87	5561	20,294	25,855
	35	640	•640	•1024	•640	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	102	5427	19,021	24,448
	36	640	•640	•1024	•640	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	100	5376	18,688	24,064
8N/7E	1	640	•640	•1792	•1280	•1280	•640	•384	•384	•384	•384	•512	•384	•384	•384	140	4480	15,616	20,096
	2	640	640	1792	1280	1280	640	384	384	384	384	512	384	384	384	130	4288	15,808	20,096
	3	640	•640	•1536	•1280	•1280	•640	•384	•384	•384	•384	•512	•384	•384	•384	120	5888	15,872	21,760
	4	640	•640	•1280	•1280	•1280	•640	•384	•384	•384	•384	•512	•384	•384	•640	80	6272	16,896	23,168
	5	640	•640	•896	•896	•1024	•640	•384	•384	•384	•384	•512	•384	•640	•640	70	9472	18,688	28,160
	6	640	•640	•768	•768	•768	•640	•384	•384	•384	•384	•512	•640	•640	•640	70	8256	18,752	27,008
	7	640	•640	•640	•640	•768	•640	•384	•384	•384	•384	•640	•640	•640	•640	80	8832	18,688	27,520
	8	640	640	640	2816	1280	1280	640	1280	•640	•640	•640	•640	•640	•640	70	6336	29,888	36,224
	9	640	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	115	6016	22,784	28,800

• Storage capacity from assumed specific yield.

TABLE B-2 (Cont.)
ESTIMATED GROUND WATER STORAGE CAPACITY BY SECTIONS
FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M D B & M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet																
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300	300-320	320-340
8N/7E	10	640	•1024	•1024	•640	•896	•1024	•1024	•1024	•1280	•1152	•512	•512	•1920	•1920	•2176	•512	•768	•768
	11	640	•1024	•1024	•640	•896	•1024	•896	•1024	•1024	•1280	•896	•1024	•1280	•1920	•1536	•640	•768	•768
	12	640	•768	•768	•1024	•896	•768	•768	•1024	•1024	•1280	•1280	•1280	•1536	•1920	•1280	•640	•768	•768
	13	320	•320	•320	•640	•448	•320	•320	•512	•448	•704	•960	•960	•960	•960	•640	•256	•384	•384
	14	640	640	640	1536	896	640	640	1024	896	1408	2944	•2560	•2176	•1920	•1280	•512	•768	•768
	15	640	•640	•640	•1536	•1280	•896	•896	•1024	•768	•1024	•2432	•2304	•2176	•1920	•1024	•640	•640	•1024
	16	640	•640	•640	•1920	•1280	•1280	•1024	•768	•768	•896	•2304	•2816	•2816	•1920	•640	•640	•640	•1280
	17	640	640	512	3200	1664	1536	1280	640	640	640	2176	3200	3200	1920	640	640	640	•1920
	18	640	640	2176	1408	896	3072	768	384	512	640	768	384	2432	1024	512	640	1664	2944
	19	640	•640	•1920	•1280	•768	•3072	•1024	•640	•768	•640	•1024	•768	•1920	•1024	•512	•640	•1536	•2560
	20	640	•640	•1280	•1024	•768	•1280	•1024	•640	•1024	•1280	•1280	•1280	•1536	•1024	•512	•768	•1280	•1920
	21	640	•768	•1024	•768	•640	•1152	•1280	•640	•1280	•1920	•1536	•1536	•1536	•1152	•768	•1024	•1024	•1024
	22	640	768	640	640	640	1152	1664	896	1664	2560	1664	•1536	•1280	•1152	•1024	•1024	•1024	•1152
	23	320	•512	•320	•320	•320	•512	•640	•384	•512	•1152	•768	•640	•640	•640	•512	•640	•640	•640
	27	320	•640	•640	•384	•640	•512	•320	•512	•512	•640	•640	•512	•512	•640	•384	•512	•512	•448
	28	640	•1280	•1920	•1024	•1024	•1280	•1024	•1280	•1280	•1536	•1536	•896	•896	•1280	•768	•768	•768	•768
	29	640	1408	2560	1280	1024	1664	1280	•1536	•1536	•1536	•1536	•896	•896	•1280	•640	•768	•768	•768
	30	640	640	640	640	640	640	2944	1536	2048	1920	1664	640	896	1408	640	640	640	640
	31	640	•640	•1280	•1536	•640	•768	•1920	•1024	•1280	•1152	•1024	•512	•896	•1408	•1024	•640	•640	•640
	32	640	384	3200	2688	384	896	384	384	384	384	384	384	•896	•1408	•1280	•768	•640	•640
	33	320	•256	•960	•768	•256	•448	•256	•512	•256	•320	•512	•256	•512	•768	•960	•448	•320	•320

Township and range M D B & M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet													Depth to water table	Storage Capacity (acre-feet)		
			340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600		Above water table	Below water table	All zones
8N/7E	10	640	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	130	6144	20,480	26,624
	11	640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	140	6528	19,456	25,984
	12	640	•640	•512	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	145	6272	19,712	25,984
	13	320	•320	•256	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	150	3104	10,528	13,632
	14	640	•512	•512	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	145	6240	23,328	29,568
	15	640	•512	•384	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	140	6912	21,632	28,544
	16	640	•384	•384	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	115	6528	23,808	30,336
	17	640	•384	•384	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	75	5600	27,452	33,052
	18	640	384	384	768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	90	6656	22,272	28,928
	19	640	•384	•384	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	95	6912	21,888	28,800
	20	640	•640	•640	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	75	3520	23,621	27,141
	21	640	•896	•896	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	115	5312	22,853	28,165
	22	640	•896	•896	•768	•768	•640	•640	•640	•640	•640	•640	•640	•640	•640	143	6650	22,919	29,569
	23	320	•512	•384	•384	•384	•320	•320	•320	•320	•320	•320	•320	•320	•320	145	2624	11,200	13,824
	27	320	•448	•448	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	143	3725	9,651	13,376
	28	640	•896	•896	•640	•512	•640	•640	•640	•640	•640	•640	•640	•640	•640	115	7296	20,736	28,032
	29	640	•896	•896	•640	•512	•640	•640	•640	•640	•640	•640	•640	•640	•640	65	5504	23,040	28,544
	30	640	896	896	640	512	•640	•640	•640	•640	•640	•640	•640	•640	•640	85	2720	24,800	27,520
	31	640	•896	•896	•640	•512	•640	•640	•640	•640	•640	•640	•640	•640	•640	85	4288	21,440	25,728
	32	640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	•640	70	6464	17,344	23,808
	33	320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	•320	100	2688	9,600	12,288

• Storage capacity from assumed specific yield

TABLE B-1 (Cont.)

ESTIMATED SPECIFIC YIELD BY SECTIONS

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300
9N/7E	20	0	•-20	•-12	•-8	•-15	•-10	•-8	•-10	•-8	•-5	•-5	•-9	•-15	•-15	•-7	•-8
	21	1	1-25	1-17	1-6	1-5	1-14	1-5	1-11	1-5	1-5	1-5	1-9	1-23	1-24	1-6	1-7
	22	0	•-20	•-16	•-7	•-6	•-14	•-7	•-11	•-8	•-8	•-7	•-10	•-15	•-15	•-6	•-7
	23	1	1-17	1-19	1-7	•-6	•-15	•-10	•-12	•-10	•-10	•-10	•-10	•-10	•-10	•-5	•-6
	24	1	1-13	1-7	1-6	•-6	•-15	•-15	•-12	•-12	•-12	•-10					
	25	0	•-10	•-6	•-6	•-7	•-18	•-18	•-13	•-14	•-14	•-12					
	26	2	1-5	1-5	1-5	1-8	1-22	1-18	1-13	2-16	2-16	2-14	2-12	2-7	2-3	2-4	2-5
	27	0	•-5	•-6	•-10	•-8	•-15	•-12	•-10	•-10	•-10	•-8	•-8	•-6	•-4	•-4	•-5
	28	3	3-11	3-7	3-14	3-9	3-7	2-4	2-3	2-3	2-4	2-8	2-7	2-4	2-4	2-4	2-4
	29	1	1-5	1-9	1-9	•-9	•-7	•-5	•-4	•-4	•-4	•-8	•-7	•-6	•-4	•-4	•-5
	30	0	•-15	•-9	•-7	•-10	•-8	•-6	•-4	•-5	•-5	•-8	•-8	•-10	•-6	•-6	•-6
	31	1	1-25	1-9	1-5	•-12	•-8	•-6	•-5	•-7	•-6	•-8	•-8	•-12	•-4	•-8	•-8
	32	3	3-23	3-20	3-13	3-17	3-11	3-11	3-5	3-11	3-7	3-10	3-9	3-13	2-4	2-10	1-14
	33	2	2-19	2-18	2-11	2-5	2-4	•-13	•-7	•-9	•-7	•-7	•-7	•-12	•-8	•-10	•-12
	34	3	3-15	3-15	3-15	3-15	3-15	3-16	2-9	2-8	2-8	1-6	1-5	1-10	1-10	1-9	1-10
	35	0	•-10	•-12	•-14	•-18	•-15	•-15	•-12	•-10	•-10	•-10	•-10	•-10	•-10	•-8	•-9
	36	3	2-7	3-8	3-14	3-20	3-16	3-12	3-17	3-13	3-12	3-14	3-17	3-9	3-13	3-8	3-7

Township and range M.D.B.&M.	Section	Number of wells	Specific yield, in percent, for indicated depth zone, in feet														
			300-320	320-340	340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600
9N/7E	20	0	•-10	•-12	•-10	•-9	•-10	•-10	•-10	•-10	•-12	•-8					
	21	1	1-10	1-12	1-10	1-10	1-10										
	22	0															
	23	1															
	24	1															
	25	0															
	26	2															
	27	0	•-8	•-8	•-8	•-8	•-8										
	28	3	2-6	•-6	•-6	•-8	•-5										
	29	1	•-6	•-6	•-6	•-8	•-5	•-4	•-8	•-8	•-5	•-4					
	30	0	•-6	•-6	•-7	•-8	•-5	•-5	•-7	•-7	•-6	•-5	•-5	•-5	•-5	•-4	•-4
	31	1	•-8	•-8	•-8	•-8	•-5	•-5	•-7	•-7	•-6	•-6	•-5	•-5	•-4	•-4	•-4
	32	3	1-17	1-4	1-16	1-20	1-20	1-20	1-20	1-12	1-3	1-20	1-6	1-3	1-5	1-5	1-5
	33	2	•-10	•-10	•-9	•-9	•-5										
	34	3	•-10	•-10	•-10	•-10	•-4										
	35	0	•-10	•-10	•-10	•-10	•-4										
	36	3															

• Value of specific yield estimated from nearest wells

TABLE B-2

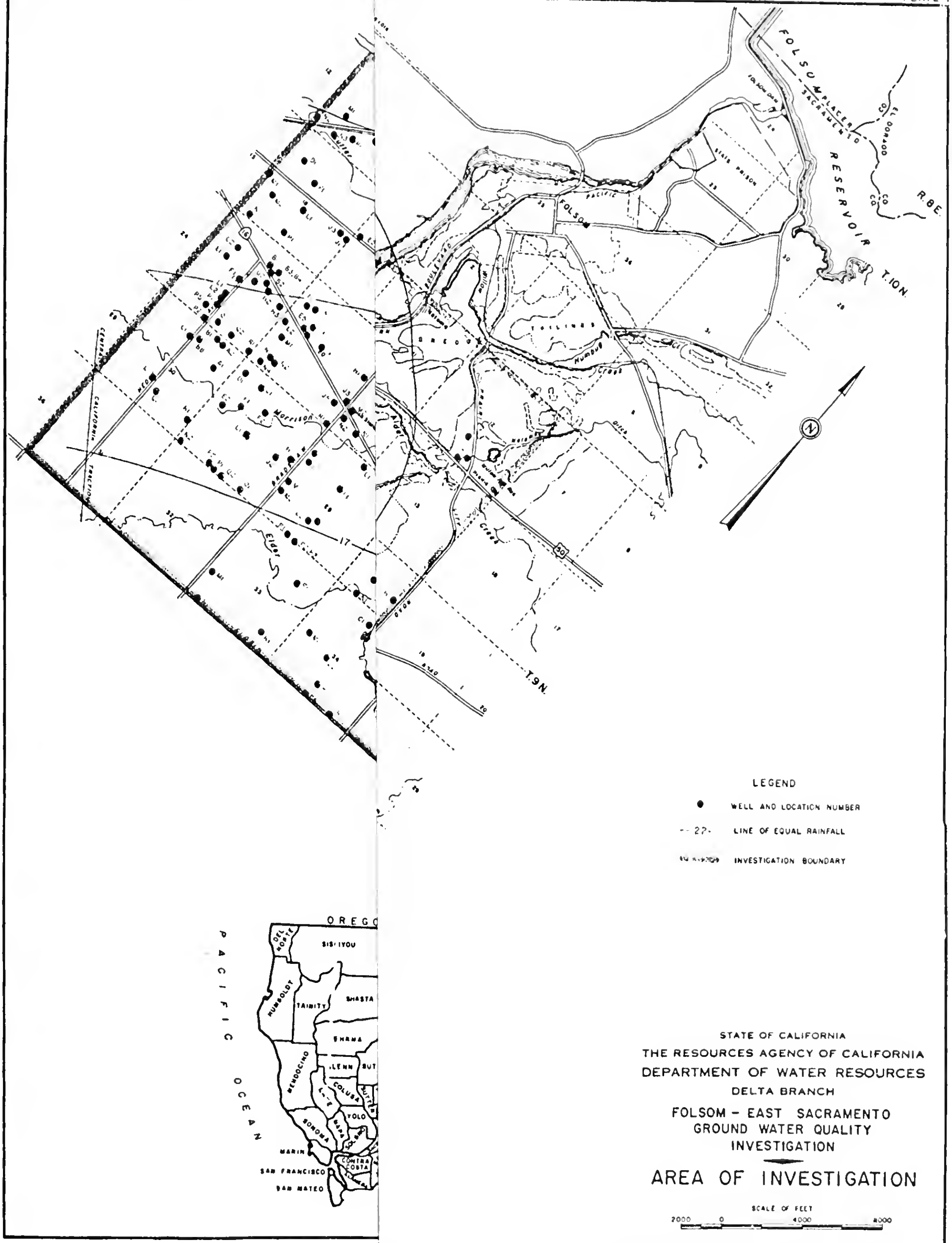
ESTIMATED GROUND WATER STORAGE CAPACITY BY SECTIONS

FOLSOM-EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

Township and range M D B&M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet																
			0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	180-200	200-220	220-240	240-260	260-280	280-300	300-320	320-340
8N/6E	1	640	896	640	640	512	896	384	512	896	•1280	•1280	•1152	•384	•640	•384	•512	•640	•768
	2	640	640	512	1152	640	768	1280	1280	1280	1280	1280	1152	384	640	384	512	640	768
	3	640	1792	2432	768	1024	896	1920	1920	512	512	512	512	512	512	512	384	384	640
	4	520	1352	1248	936	1144	832	728	520	1976	2496	312	312	520	520	936	•416	•312	•312
	5	350	1050	980	1050	980	560	770	560	•1050	•1050	•350	•350	•350	•350	•350	•350	•350	•420
	6	50	50	90	130	100	110	90	100	120	•100	•60	•70	•50	•50	•50	•50	•50	•60
	7	625	1750	1750	1125	1625	375	875	375	500	•625	•1250	•1250	•625	•625	•625	•625	•625	•625
	8	640	1920	1408	1280	1280	1024	768	•640	•640	•640	•1280	•1280	•640	•640	•640	•640	•640	•640
	9	640	2048	2944	1280	768	1280	896	640	640	640	2944	1536	384	384	384	512	384	384
	10	640	•1920	•2432	•1024	•640	•896	•768	•768	•512	•512	•640	•768	•512	•384	•768	•640	•1152	•640
	11	640	1920	1664	512	512	640	768	768	512	384	640	640	512	384	1408	1536	1152	640
	12	640	•1280	•1920	•1152	•512	•896	•640	•512	•640	•896	•1152	•1920	•1792	•384	•896	•896	•896	•896
	13	640	1152	2304	2432	384	1280	640	512	640	1536	1664	3200	3072	•384	•896	•896	•896	•896
	14	640	1280	768	640	512	896	896	768	512	512	384	384	512	384	384	768	768	1408
	15	640	•1408	•1408	•512	•768	•640	•768	•640	•512	•512	•384	•384	•512	•384	•384	•768	•768	•1408
	16	640	1664	1408	512	896	384	640	384	•640	•1920	•2688	•2304	•1920	•512	•512	•512	•768	•768
	17	640	2176	1024	1280	1792	1664	1280	896	1792	2560	2560	2944	2688	512	512	512	•768	•896
	18	640	896	2176	1792	1536	1280	640	640	768	1152	768	1536	2048	1920	384	384	896	1280
	19	640	1152	3072	2048	1280	1152	1024	896	640	640	768	768	640	384	384	1152	896	•896
	20	640	1280	3200	1664	1280	1024	1152	768	640	512	640	768	•512	•384	•512	•640	•640	•640
	21	640	1792	3200	640	1280	1024	•1152	•768	•640	•512	•640	•768	•512	•384	•512	•640	•640	•640
	22	640	•1280	•896	•1024	•896	•768	•512	•512	•1024	•896	•1024	•640	•384	•384	•640	•512	• 384	•768
	23	640	•1280	•896	•1024	•896	•768	•512	•512	•1024	•896	•1024	•640	•384	•384	•640	•512	•384	•768

Township and range M D B&M	Section	Area (acres)	Storage capacity, in acre-feet, for indicated zone, in feet													Depth to water table	Storage Capacity (acre-feet)		
			340-360	360-380	380-400	400-420	420-440	440-460	460-480	480-500	500-520	520-540	540-560	560-580	580-600		Above water table	Below water table	All zones
8N/6E	1	640	•1152	•640	•1280	•896	•2304	•1280	•896	•1152	•640	•640	•640	•640	•640	78	2586	22,630	25,216
	2	640	1152	640	1280	896	2304	1280	896	1152	•640	•640	•640	•640	•640	65	2464	24,160	26,624
	3	640	896	640	640	1152	1792	512	1152	1152	640	•640	•640	•640	•640	55	4800	22,080	26,880
	4	520	•312	•416	•624	•1040	•1664	•1144	•1040	•832	•728	•728	•728	•728	•728	45	2834	22,750	25,584
	5	350	•490	•350	•420	•700	•1050	•700	•700	•560	•490	•490	•490	•490	•490	40	2030	16,310	18,340
	6	50	•60	•50	•60	•80	•150	•120	•100	•80	•80	•70	•70	•70	•70	40	140	2,270	2,410
	7	625	•625	•625	•875	•625	•1875	•1875	•1250	•1000	•1250	•1000	•1000	•1000	•1000	43	3669	25,581	29,250
	8	640	•640	•640	•896	•640	•1920	•1920	•1280	•1024	•1280	•1024	•1024	•1024	•1024	45	3648	26,688	30,336
	9	640	384	384	896	384	•2560	•2560	•1280	•1024	•1280	•1024	•1024	•1024	•384	50	5632	26,624	32,256
	10	640	•1152	•1536	•1408	•1408	•2688	•2560	•1408	•1024	•1408	•1024	•1024	•1024	•384	55	5120	27,904	33,024
	11	640	1152	1536	1408	1408	2688	2560	1408	1024	1408	1024	1024	384	•384	60	4096	27,904	32,000
	12	640	•1280	•1536	•1920	•1536	•2176	•1920	•1536	•1280	•1280	•1280	•1280	•1280	•1280	85	5088	31,776	36,864
	13	640	•1280	•1536	•1920	•1536	•2176	•1920	•1536	•1280	•1280	•1280	•1280	•1280	•1280	90	6912	35,456	42,368
	14	640	1280	1536	2176	1664	1920	1024	1792	1664	•1280	•1280	•1280	•1280	•1280	75	3072	28,260	31,332
	15	640	•1280	•1536	•2176	•1664	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	57	3251	24,781	28,032
	16	640	•768	•768	•1408	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	58	3532	28,340	31,872
	17	640	•896	•896	•1280	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	60	4480	34,944	39,424
	18	640	•896	•896	•1280	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	55	4416	29,248	33,664
	19	640	•896	•896	•1280	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	68	6784	24,576	31,360
	20	640	•640	•640	•1280	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	65	6464	22,848	29,312
	21	640	•640	•640	•1280	•1280	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	60	5632	23,168	28,800
	22	640	•640	•640	•1792	•1536	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	65	3424	22,944	26,368
	23	640	•640	•640	•1792	•1536	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	•1024	90	4480	21,888	26,368

• Storage capacity from assumed specific yield



STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM - EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

AREA OF INVESTIGATION

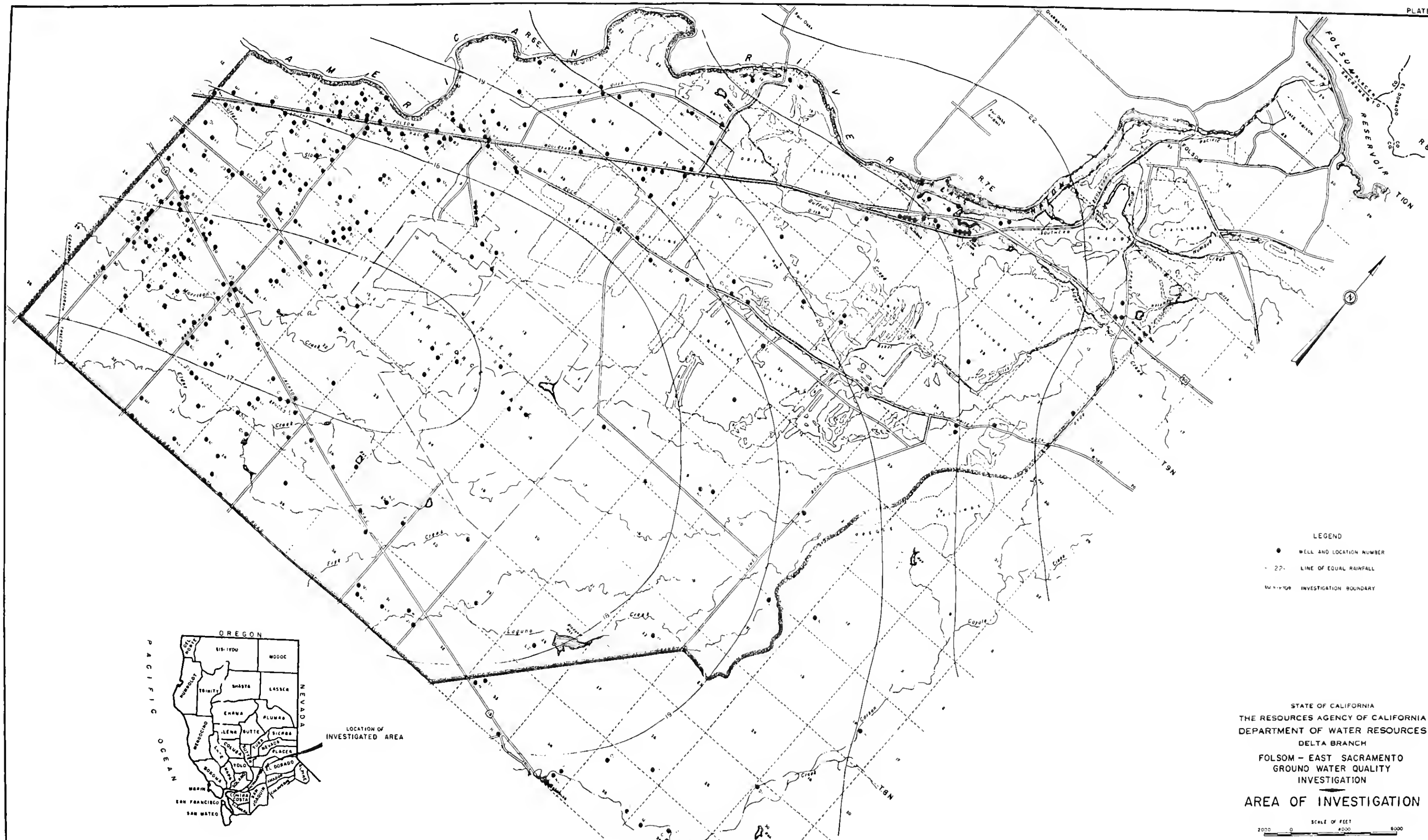
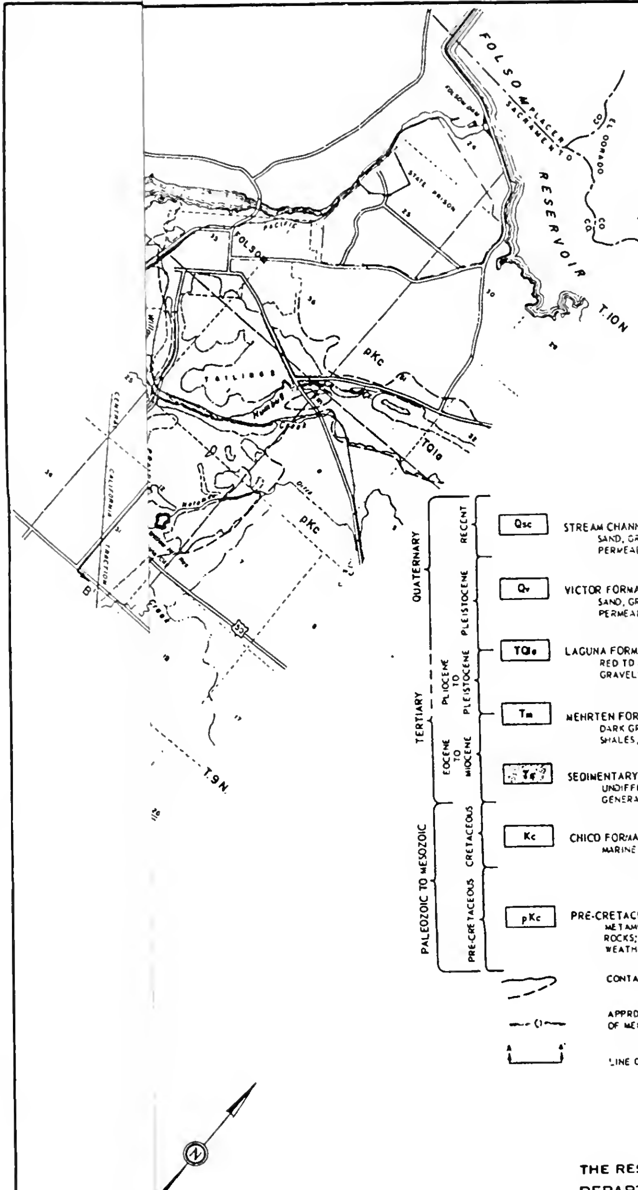


PLATE 1
AMERICAN RIVER
FOLSOM RESERVOIR
R6E
R7E
R8E
T9N
T8N
MATHER AIR FORCE BASE
LEGEND
WELL AND LOCATION NUMBER
LINE OF EQUAL RAINFALL
INVESTIGATION BOUNDARY
OREGON
NEVADA
PACIFIC OCEAN
LOCATION OF INVESTIGATED AREA
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH
FOLSOM – EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION
AREA OF INVESTIGATION
SCALE OF FEET



LEGEND

QUATERNARY — RECENT

Qsc STREAM CHANNEL DEPOSITS
SAND, GRAVEL, SILT, W TH MINOR AMOUNTS OF CLAY; HIGHLY PERMEABLE.

QUATERNARY — PLEISTOCENE

Qv VICTOR FORMATION
SAND, GRAVEL, YELL W AND BRC N CLAYS; GENERALLY PERMEABLE.

TERTIARY — PLIOCENE TO PLEISTOCENE

TQlo LAGUNA FORMATION
RED TO BROWN SILTS D CLAYS, LENTICULAR SANDS AND GRAVELS; MODERATE PERMEABLE.

Tm MEHRTEN FORMATION
DARK GREY TO BLACK NDS, SANDSTONES, CONGLOMERATES, SHALES, MINOR AGGLO RATE; MODERATELY PERMEABLE.

TERTIARY — EOCENE TO MIOCENE

Ts SEDIMENTARY ROCKS
UNDIFFERENTIATED I E AND VALLEY SPRINGS FORMATIONS; GENERALLY LOW PER ABILITY AND OR POOR QUALITY WATER.

PALEOZOIC TO MESOZOIC — CRETACEOUS

Kc CHICO FORMATION
MARINE SEDIMENTARY OCKS; CONTAINS POOR QUALITY WATER.

PALEOZOIC TO MESOZOIC — PRE-CRETACEOUS

pKc PRE-CRETACEOU BASEME T COMPLEX
METAMORPHOSED IG OUS AND SEDIMENTARY ROCKS, GRANITIC ROCKS; NOT WATER-B ARING EXCEPT WHERE FRACTURED OR WEATHERED NEAR SU FACE.

CONTACT, DASHED WHERE INFERRED.

APPROXIMATE LINES OF EQUAL ELEV TION ON TOP SURFACE OF MEHRTEN FORMATION. U S C & G S DATUM

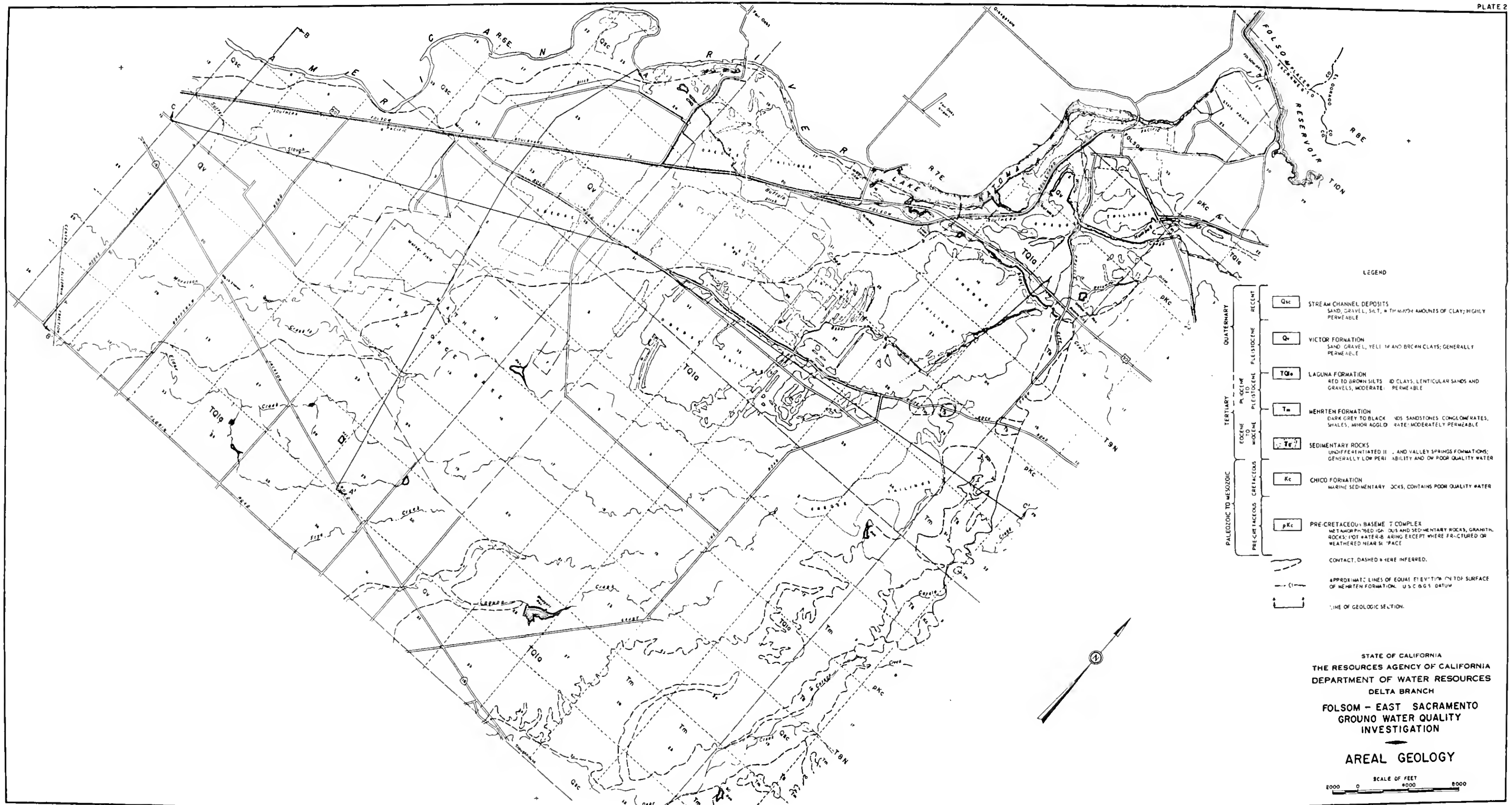
A — A' LINE OF GEOLOGIC SECTION.

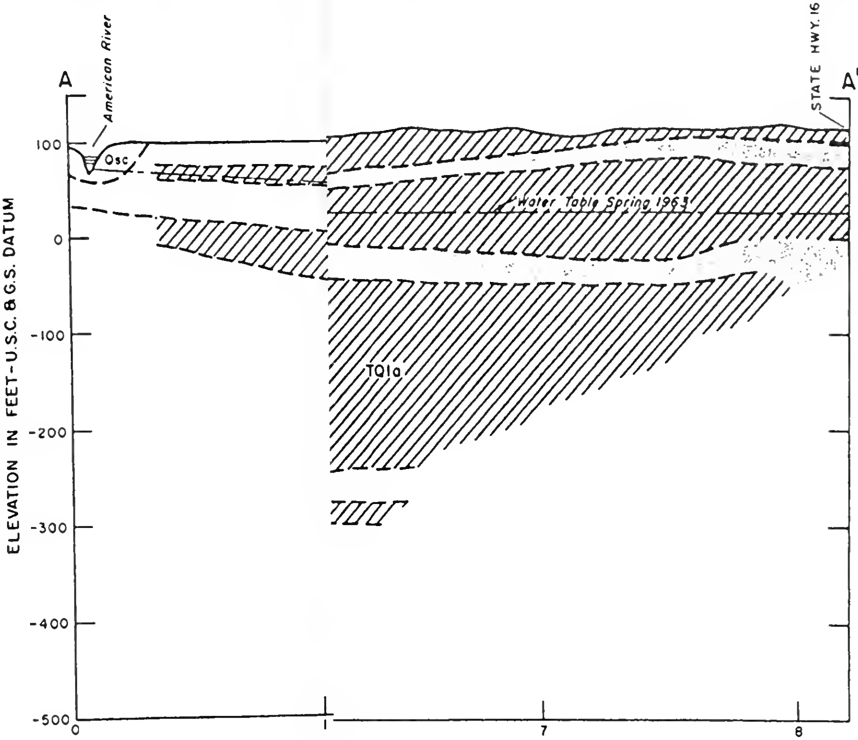
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

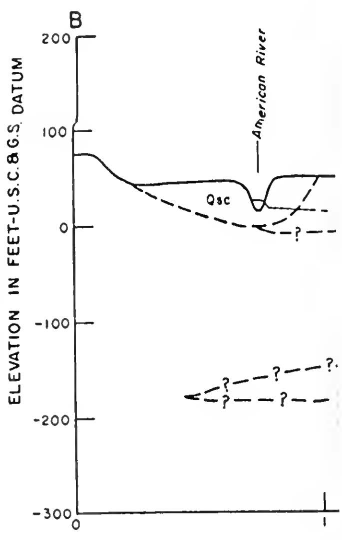
FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

AREAL GEOLOGY

SCALE OF FEET
2000 0 4000 8000


AMERICAN RIVER
LAKE NATOMA
FOLSOM RESERVOIR
R.6E.
R7E
R8E
T9N
T8N
TQla
Qv
Qsc
Tm
pKc
LEGEND
QUATERNARY
TERTIARY
PALEOZOIC TO MESOZOIC
RECENT
PLEISTOCENE
PLIOCENE TO PLEISTOCENE
EOCENE TO MIOCENE
CRETACEOUS
PRE-CRETACEOUS
Qsc STREAM CHANNEL DEPOSITS
SAND, GRAVEL, SILT, WITH MINOR AMOUNTS OF CLAY; HIGHLY PERMEABLE
Qv VICTOR FORMATION
SAND, GRAVEL, YELLOW AND BROWN CLAYS; GENERALLY PERMEABLE
TQla LAGUNA FORMATION
RED TO BROWN SILTS AND CLAYS, LENTICULAR SANDS AND GRAVELS, MODERATELY PERMEABLE
Tm MEHRTEN FORMATION
DARK GREY TO BLACK SANDS, SANDSTONES, CONGLOMERATES, SHALES, MINOR AGGLOMERATE; MODERATELY PERMEABLE
Te SEDIMENTARY ROCKS
UNDIFFERENTIATED IONE AND VALLEY SPRINGS FORMATIONS; GENERALLY LOW PERMEABILITY AND OR POOR QUALITY WATER
Kc CHICO FORMATION
MARINE SEDIMENTARY ROCKS, CONTAINS POOR QUALITY WATER
pKc PRE-CRETACEOUS BASEMENT COMPLEX
METAMORPHOSED IGNEOUS AND SEDIMENTARY ROCKS, GRANITIC ROCKS; NOT WATER-BEARING EXCEPT WHERE FRACTURED OR WEATHERED NEAR SURFACE
CONTACT, DASHED WHERE INFERRED.
APPROXIMATE LINES OF EQUAL ELEVATION ON TOP SURFACE OF MEHRTEN FORMATION. U.S.C.&G.S. DATUM
LINE OF GEOLOGIC SECTION.
N
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH
FOLSOM - EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION
AREAL GEOLOGY
SCALE OF FEET
2000 0 4000 8000





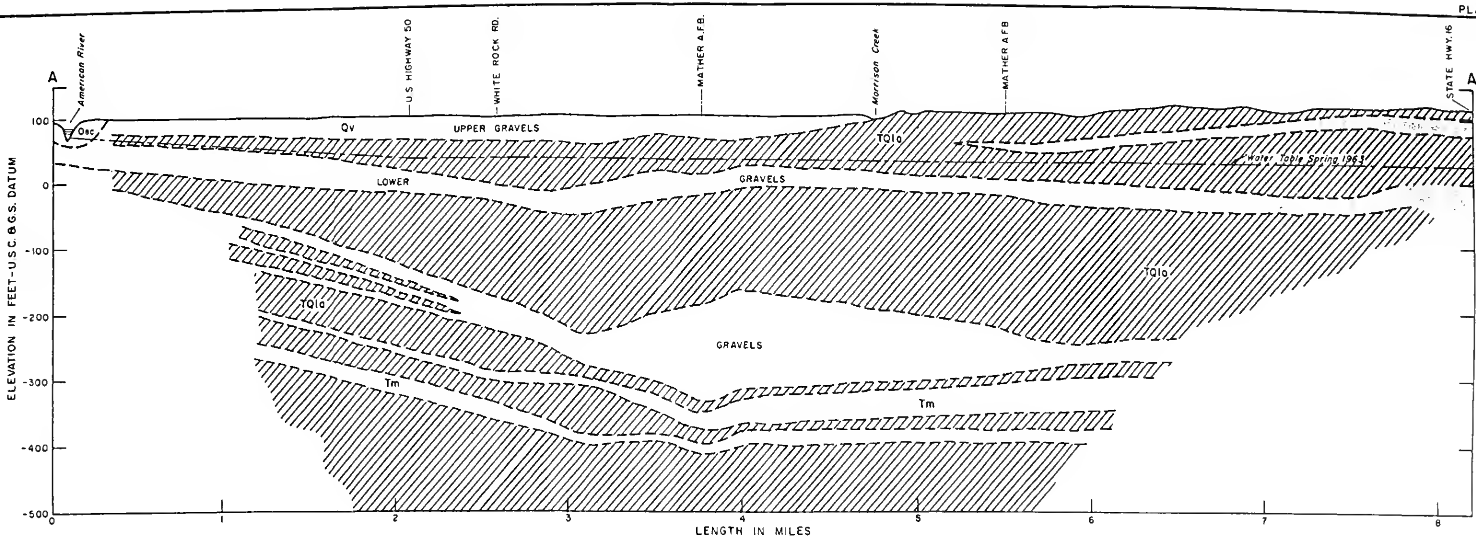
LEGEND

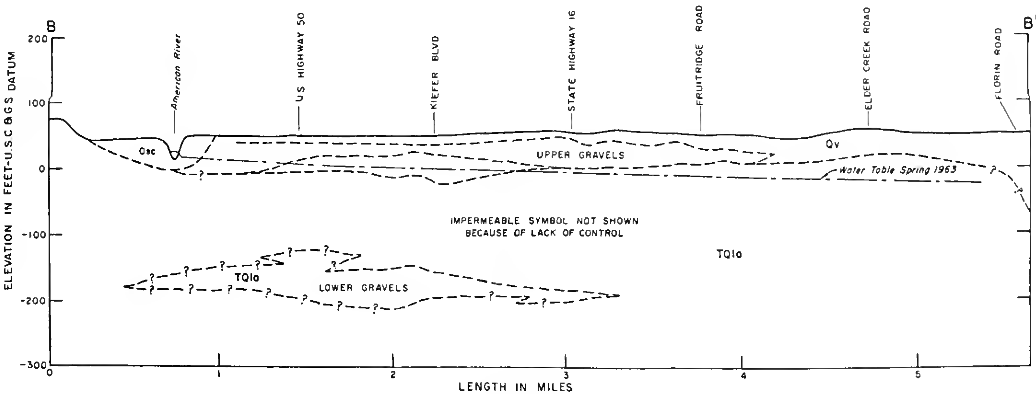
Qsc	STREAM CHANNEL DEPOSITS SAND, GRAVEL, SILT, WITH MINOR AMOUNTS OF CLAY; HIGHLY PERMEABLE.
Qv	VICTOR FORMATION SAND, GRAVEL, YELLOW AND BROWN CLAYS; GENERALLY PERMEABLE.
TQla	LAGUNA FORMATION RED TO BROWN SILTS AND CLAYS, LENTICULAR SANDS AND GRAVELS; MODERATELY PERMEABLE.
Tm	MEHRTEN FORMATION DARK GREY TO BLACK SANDS, SANDSTONES, CONGLOMERATES, SHALES, MINOR AGGLOMERATE; MODERATELY PERMEABLE.
////	HATCHED AREAS GENERALLY IMPERMEABLE

STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

GEOLOGIC SECTIONS A-A' and B-B'





LEGEND

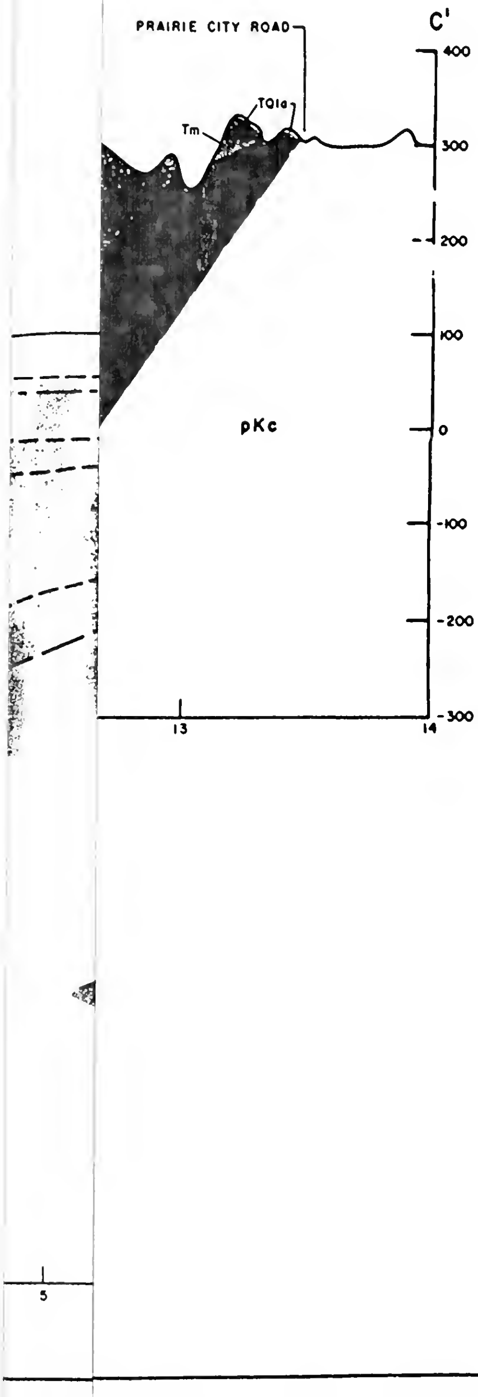
Qsc	STREAM CHANNEL DEPOSITS SAND, GRAVEL, SILT, WITH MINOR AMOUNTS OF CLAY; HIGHLY PERMEABLE
Qv	VICTOR FORMATION SAND GRAVEL, YELLOW AND BROWN CLAYS, GENERALLY PERMEABLE
TQlo	LAGUNA FORMATION RED TO BROWN SILTS AND CLAYS, LENTICULAR SANDS AND GRAVELS, MODERATELY PERMEABLE.
Tm	MEHRTEN FORMATION DARK GREY TO BLACK SANDS, SANDSTONES, CONGLOMERATES, SHALES, MINOR AGGLOMERATE; MODERATELY PERMEABLE
//////	HATCHED AREAS GENERALLY IMPERMEABLE

STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM - EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

GEOLOGIC SECTIONS A-A' and B-B'

DEPARTMENT OF WATER RESOURCES 1963



LEGEND

Qv — VICTOR FORMATION
SAND, GRAVEL, YELLOW AND BROWN CLAYS; GENERALLY PERMEABLE.

LAGUNA FORMATION
RED TO BROWN SILTS AND CLAYS, LENTICULAR SANDS AND GRAVELS; MODERATELY PERMEABLE.

MEHRTEN FORMATION
DARK GREY TO BLACK SANDS, SANDSTONES, CONGLOMERATES, SHALES, MINOR AGGLOMERATE; MODERATELY PERMEABLE.

SEDIMENTARY ROCKS
UNDIFFERENTIATED IONE AND VALLEY SPRINGS FORMATIONS; GENERALLY LOW PERMEABILITY AND/OR POOR QUALITY WATER.

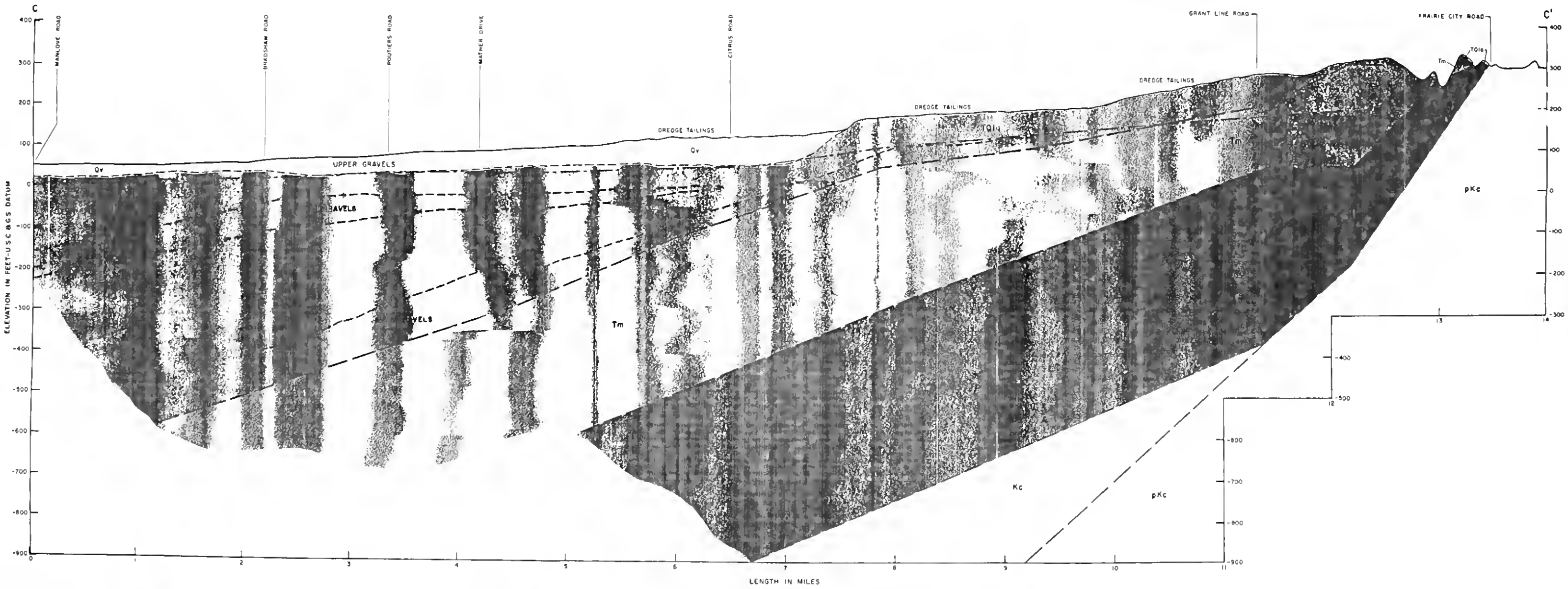
Kc — CHICO FORMATION
MARINE SEDIMENTARY ROCKS; CONTAINS POOR QUALITY WATER.

pKc — PRE-CRETACEOUS BASEMENT COMPLEX
METAMORPHOSED IGNEOUS AND SEDIMENTARY ROCKS, GRANITIC ROCKS; NOT WATER-BEARING EXCEPT WHERE FRACTURED OR WEATHERED NEAR SURFACE.

STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM – EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

GEOLOGIC SECTION C-C'



LEGEND

Qv — VICTOR FORMATION
SAND, GRAVEL, YELLOW AND BROWN CLAYS. GENERALLY PERMEABLE.

LAGUNA FORMATION
RED TO BROWN SILTS AND CLAYS, LENTICULAR SANDS AND GRAVELS. MODERATELY PERMEABLE.

MEHRTEN FORMATION
GRAY TO BLACK SANDS, SANDSTONES, CONGLOMERATES, SHALES, MINOR AGGLOMERATE. MODERATELY PERMEABLE.

SEDIMENTARY ROCKS
UNDIFFERENTIATED IONE AND VALLEY SPRINGS FORMATIONS. GENERALLY LOW PERMEABILITY AND/OR POOR QUALITY WATER.

Kc — CHICO FORMATION
MARINE SEDIMENTARY ROCKS. CONTAINS POOR QUALITY WATER.

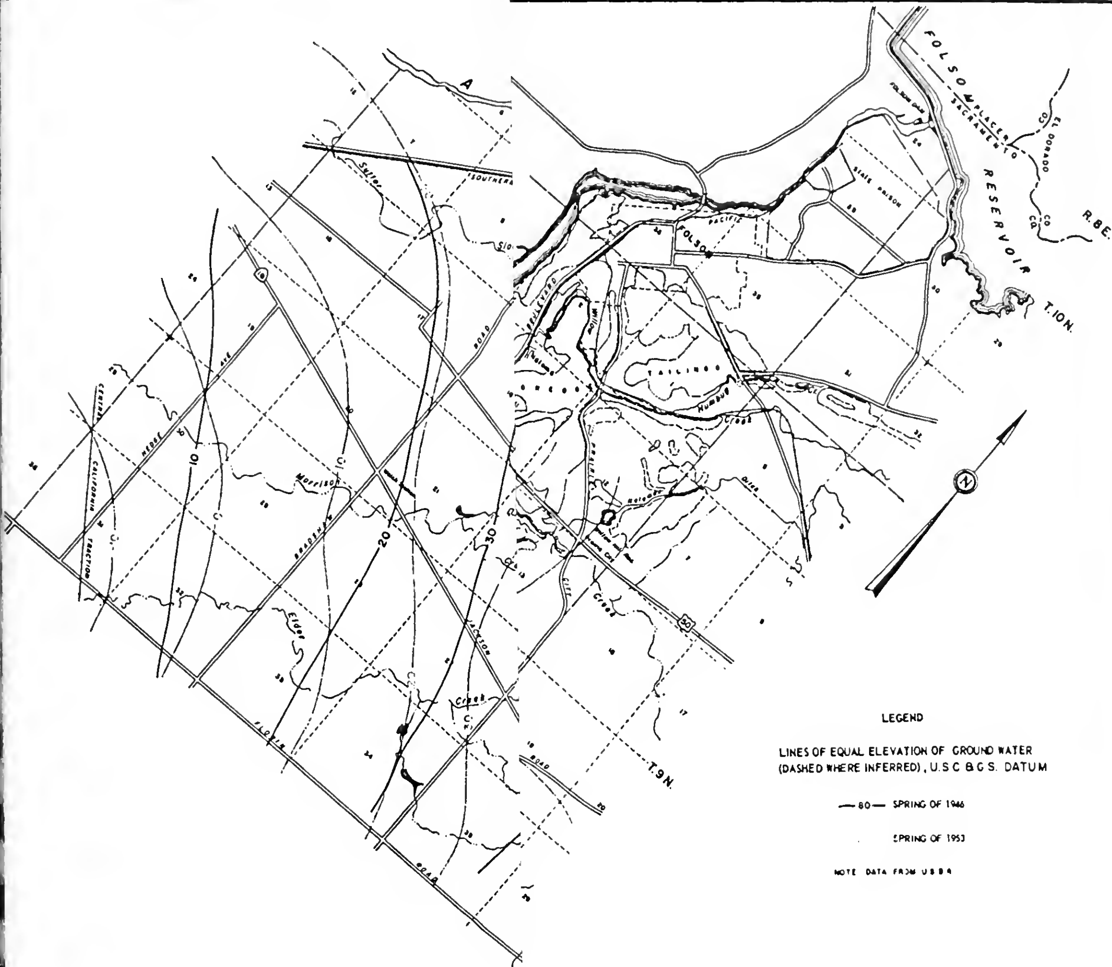
pKc — PRE-CRETACEOUS BASEMENT COMPLEX
METAMORPHOSED IGNEOUS AND SEDIMENTARY ROCKS, GRANITIC ROCKS. NOT WATER-BEARING EXCEPT WHERE FRACTURED OR WEATHERED NEAR SURFACE.

STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM - EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

GEOLOGIC SECTION C-C'

DEPARTMENT OF WATER RESOURCES 1963

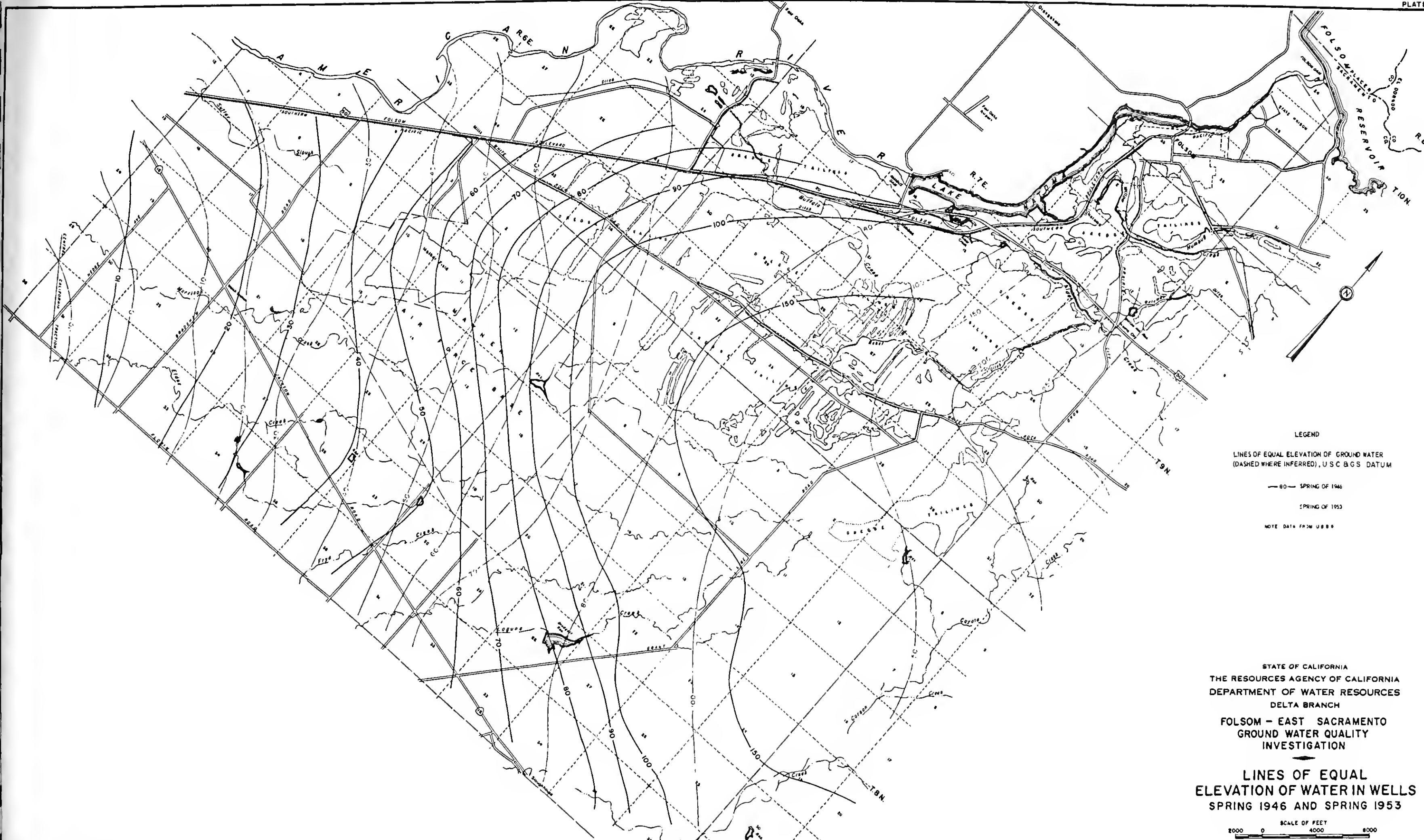


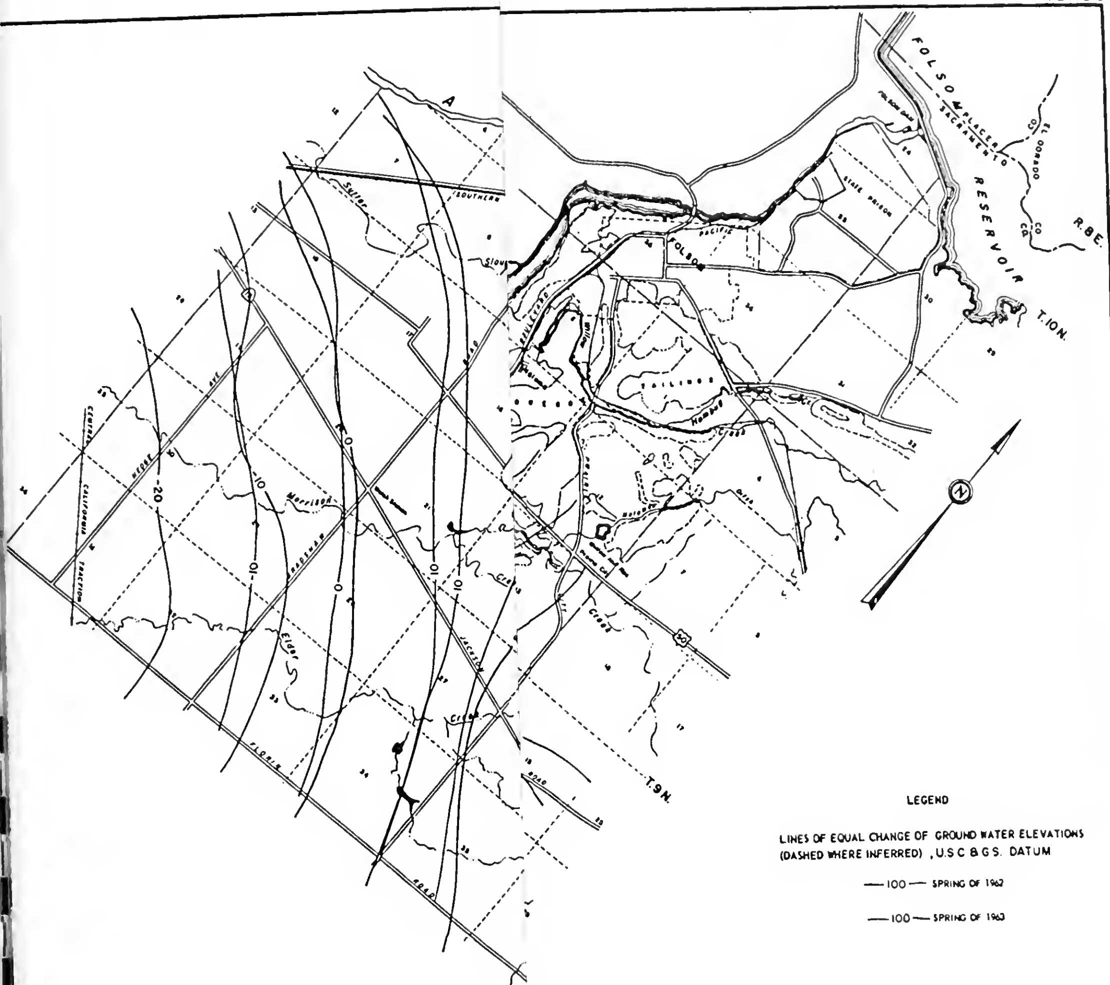
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM – EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

LINES OF EQUAL ELEVATION OF WATER IN WELLS
SPRING 1946 AND SPRING 1953

SCALE OF FEET
2000 0 4000 8000


AMERICAN RIVER
FOLSOM LAKE
FOLSOM
R.6E.
R.7E.
R.8E.
T.9N.
T.8N.
AIR FORCE BASE
TAILINGS
DREDGE TAILINGS
SOUTHERN PACIFIC
FOLSOM BOULEVARD
Buffalo Creek
Morrison Creek
Elder Creek
Laguna Creek
Deer Creek
Carson Creek
Coyote Creek
Frye Creek
Grant
Sutter
10
20
30
40
50
60
70
80
90
100
150
LEGEND
LINES OF EQUAL ELEVATION OF GROUND WATER
(DASHED WHERE INFERRED), U S C & G S DATUM
—80— SPRING OF 1946
SPRING OF 1953
NOTE DATA FROM U S G S
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH
FOLSOM – EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION
LINES OF EQUAL
ELEVATION OF WATER IN WELLS
SPRING 1946 AND SPRING 1953
SCALE OF FEET
2000 0 4000 8000



LEGEND

LINES OF EQUAL CHANGE OF GROUND WATER ELEVATIONS (DASHED WHERE INFERRED), U.S.C. & G.S. DATUM

—100— SPRING OF 1962

—100— SPRING OF 1963

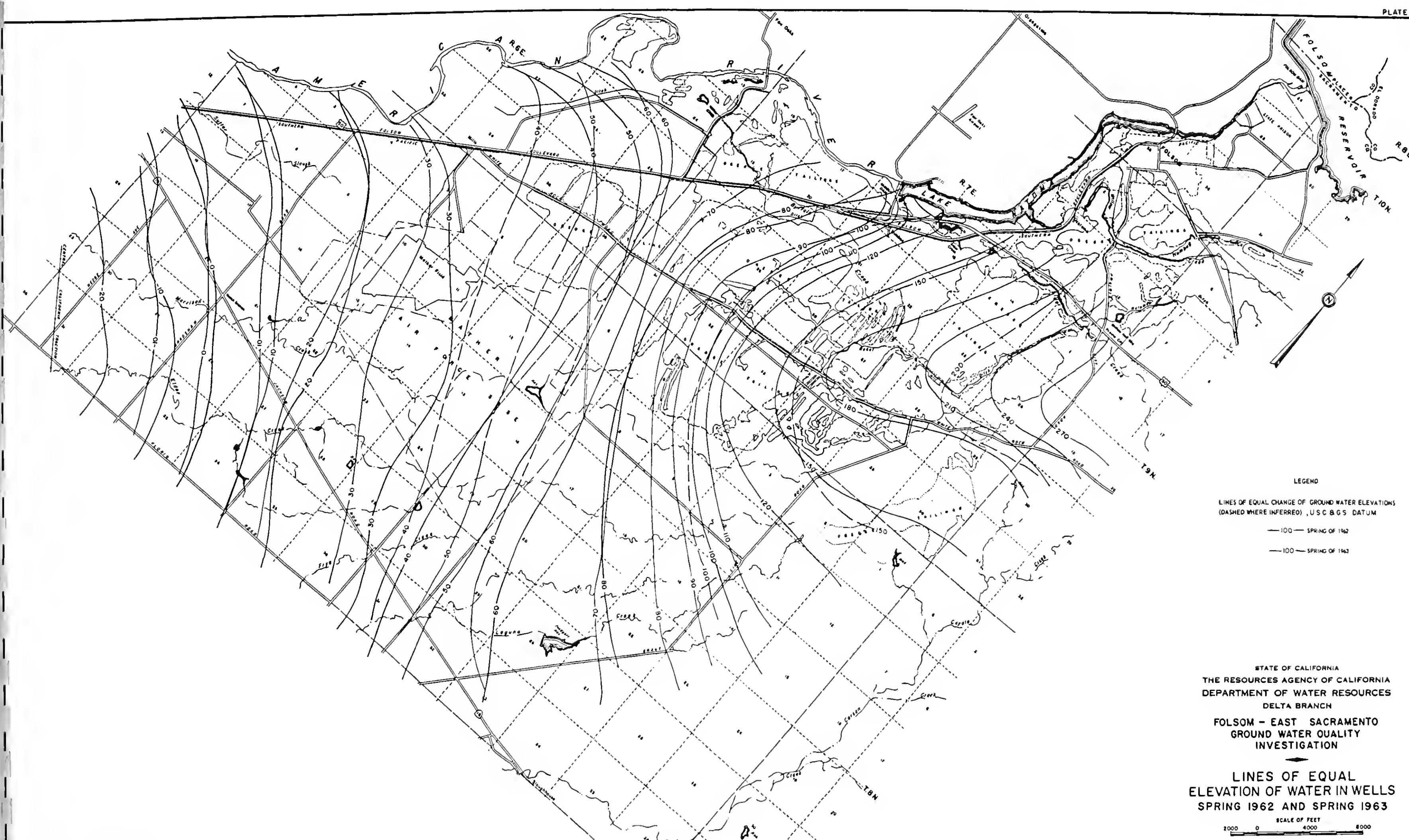
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM - EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

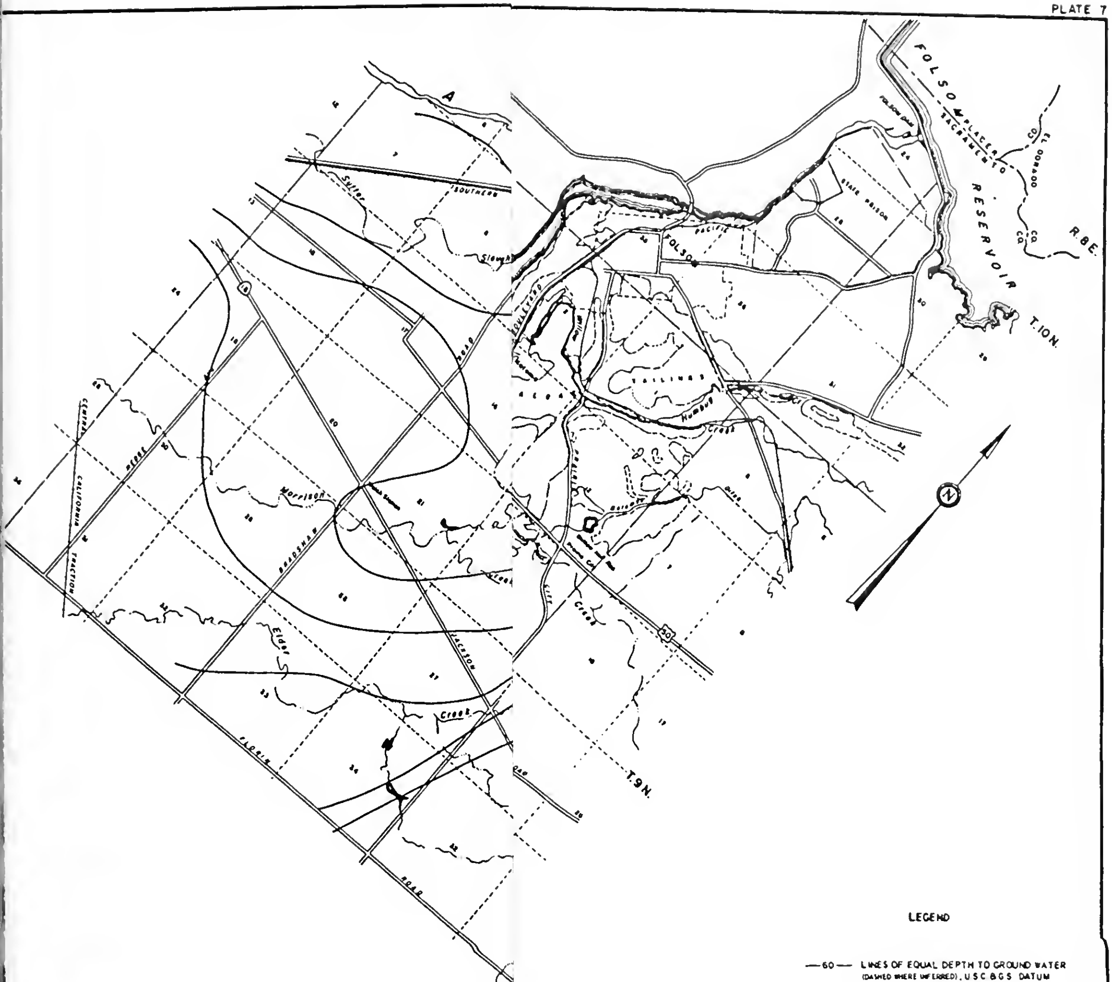
LINES OF EQUAL ELEVATION OF WATER IN WELLS
SPRING 1962 AND SPRING 1963

SCALE OF FEET
2000 0 4000 8000

PLATE 6



DEPARTMENT OF WATER RESOURCES 1963



LEGEND

—60— LINES OF EQUAL DEPTH TO GROUND WATER (DASHED WHERE INFERRED), U.S.C.& G.S. DATUM

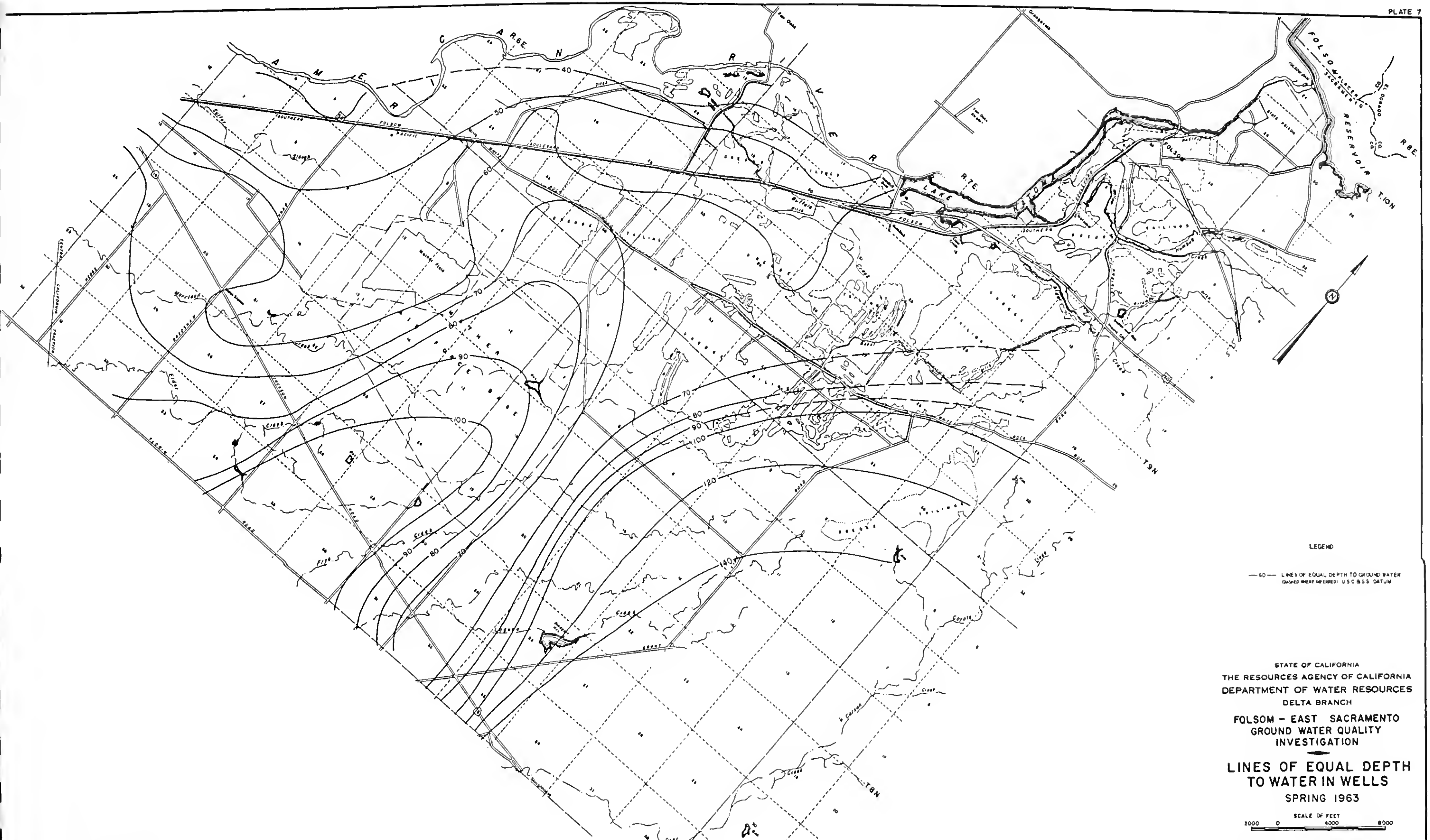
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

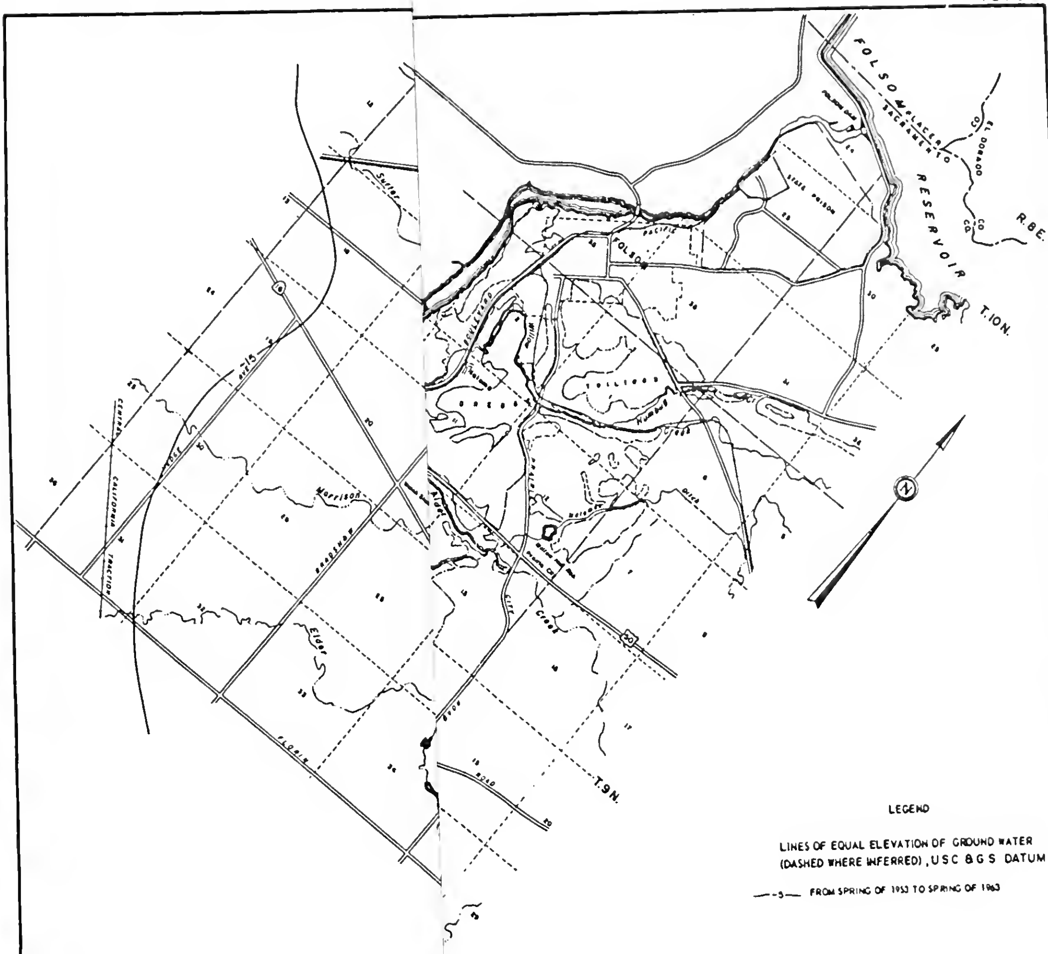
FOLSOM - EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

LINES OF EQUAL DEPTH TO WATER IN WELLS

SPRING 1963

SCALE OF FEET
2000 0 4000 8000


AMERICAN RIVER
FOLSOM LAKE
FOLSOM
RESERVOIR
T.9N
T.8N
LEGEND
—60— LINES OF EQUAL DEPTH TO GROUND WATER (DASHED WHERE INFERRED) U.S.C.&G.S. DATUM
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH
FOLSOM - EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION
LINES OF EQUAL DEPTH
TO WATER IN WELLS
SPRING 1963
SCALE OF FEET
2000 0 4000 8000



LEGEND

LINES OF EQUAL ELEVATION OF GROUND WATER (DASHED WHERE INFERRED), USC & G S DATUM

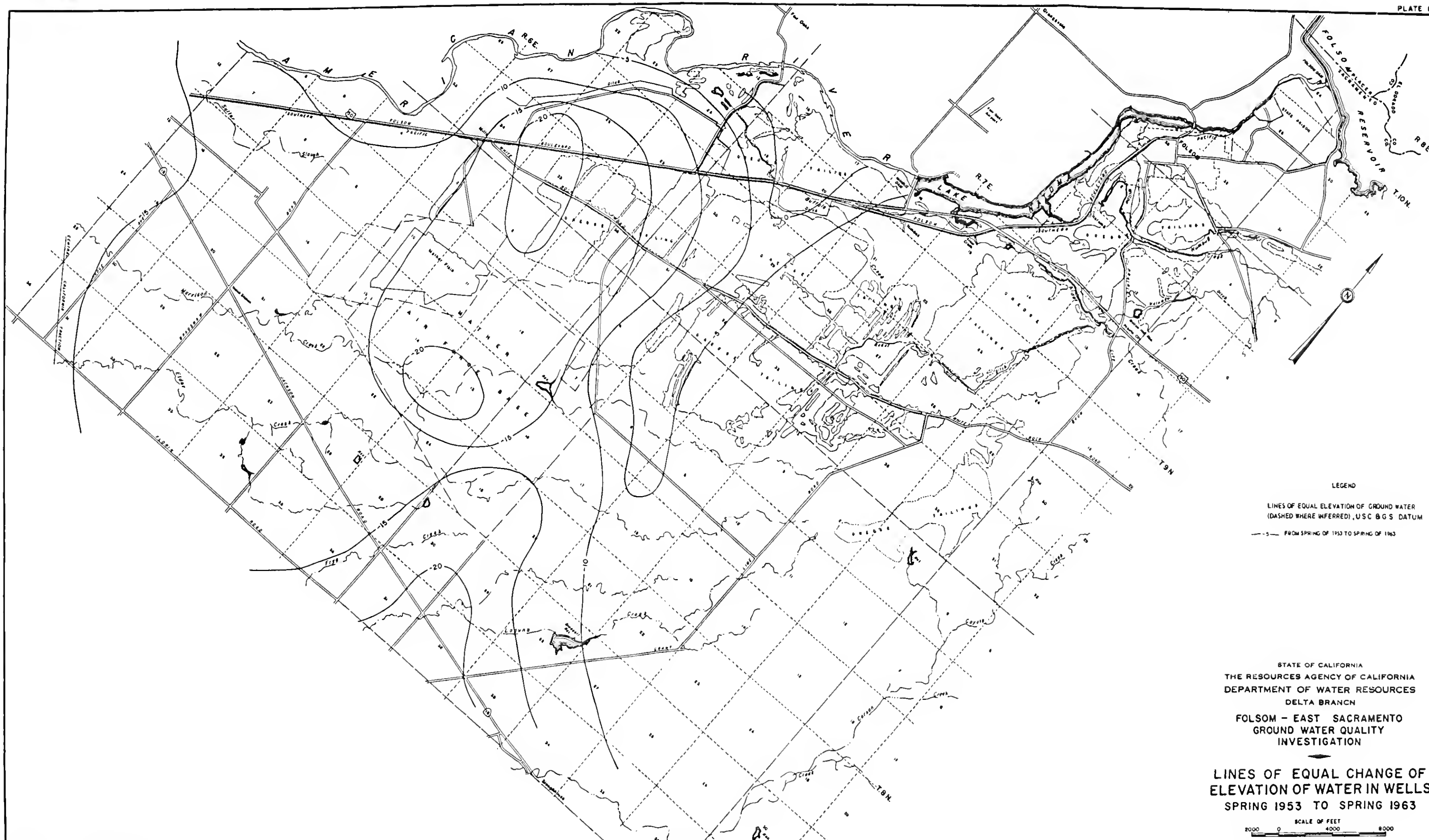
—-5— FROM SPRING OF 1953 TO SPRING OF 1963

STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM - EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

LINES OF EQUAL CHANGE OF ELEVATION OF WATER IN WELLS
SPRING 1953 TO SPRING 1963

SCALE OF FEET
2000 0 4000 8000



LEGEND

LINES OF EQUAL ELEVATION OF GROUND WATER (DASHED WHERE INFERRED), USC&GS DATUM

—5— FROM SPRING OF 1953 TO SPRING OF 1963

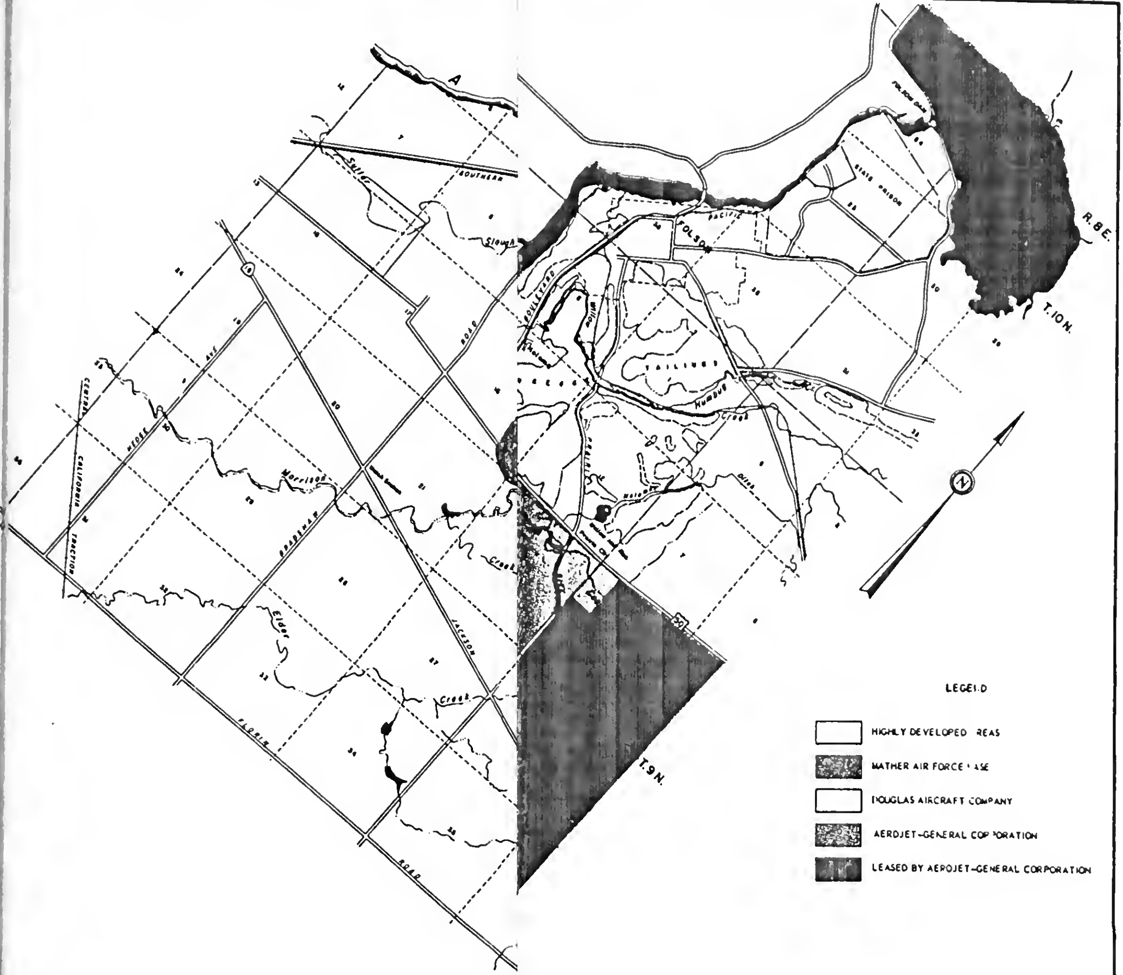
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM – EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

LINES OF EQUAL CHANGE OF ELEVATION OF WATER IN WELLS
SPRING 1953 TO SPRING 1963

SCALE OF FEET
2000 0 4000 8000

DEPARTMENT OF WATER RESOURCES 1963

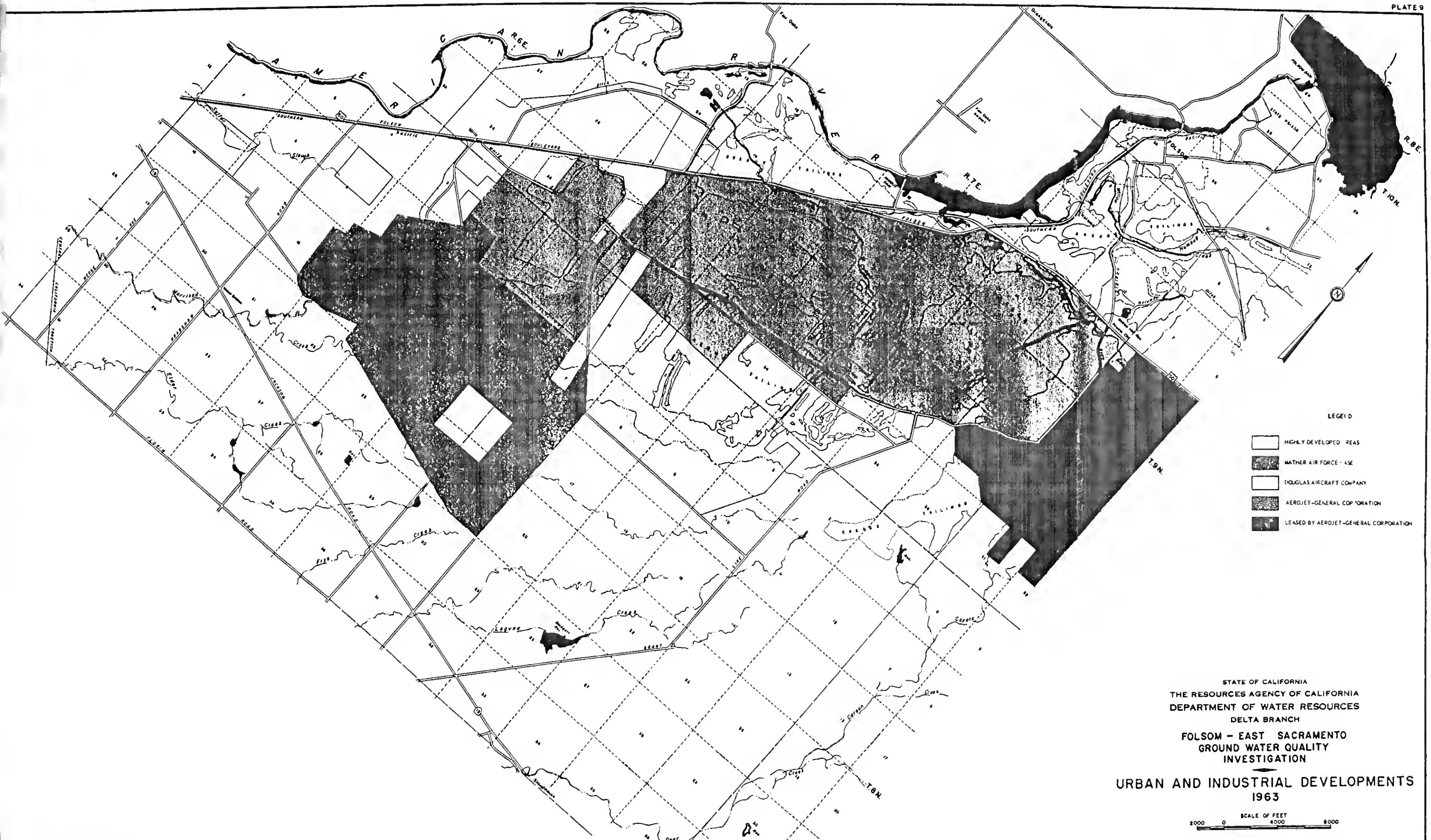


STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM - EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

URBAN AND INDUSTRIAL DEVELOPMENTS
1963

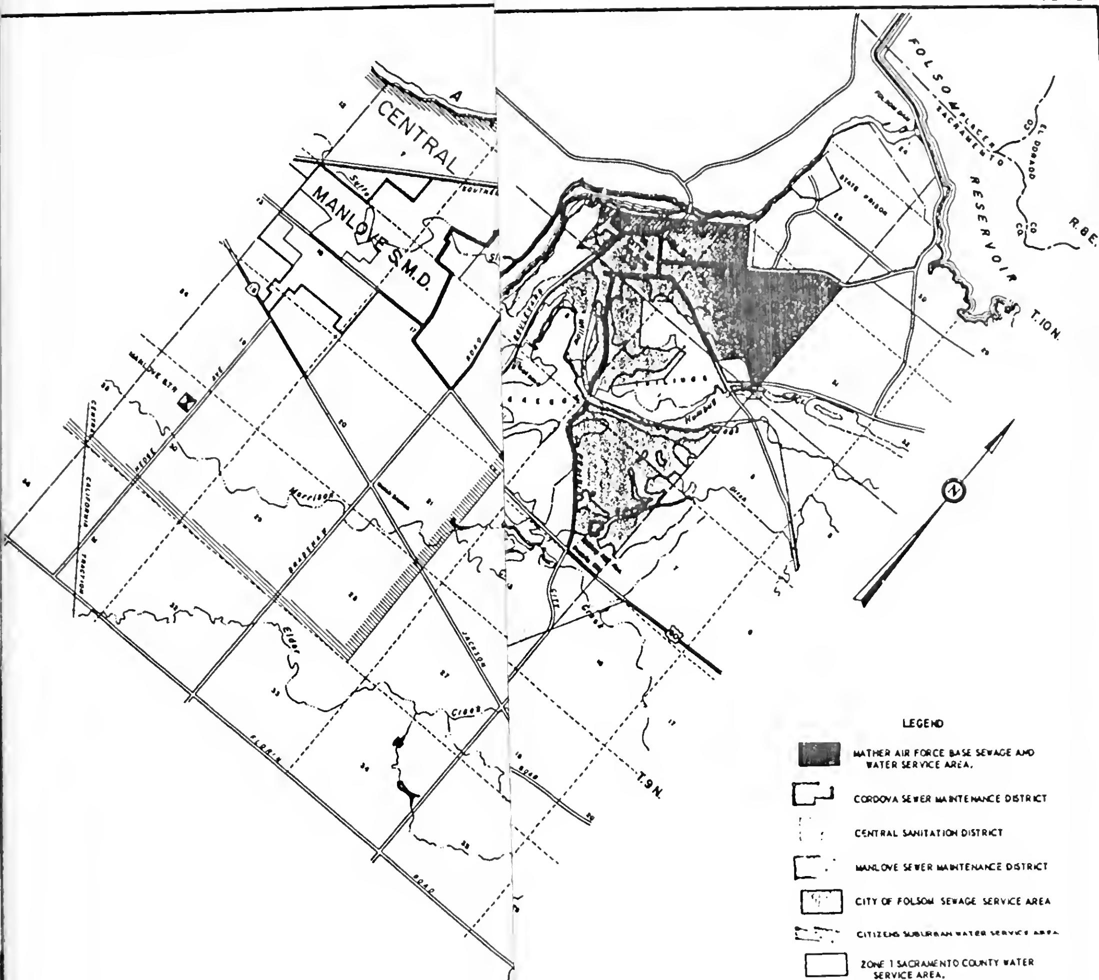
SCALE OF FEET
2000 0 4000 8000



STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM – EAST SACRAMENTO GROUND WATER QUALITY INVESTIGATION

URBAN AND INDUSTRIAL DEVELOPMENTS 1963



LEGEND

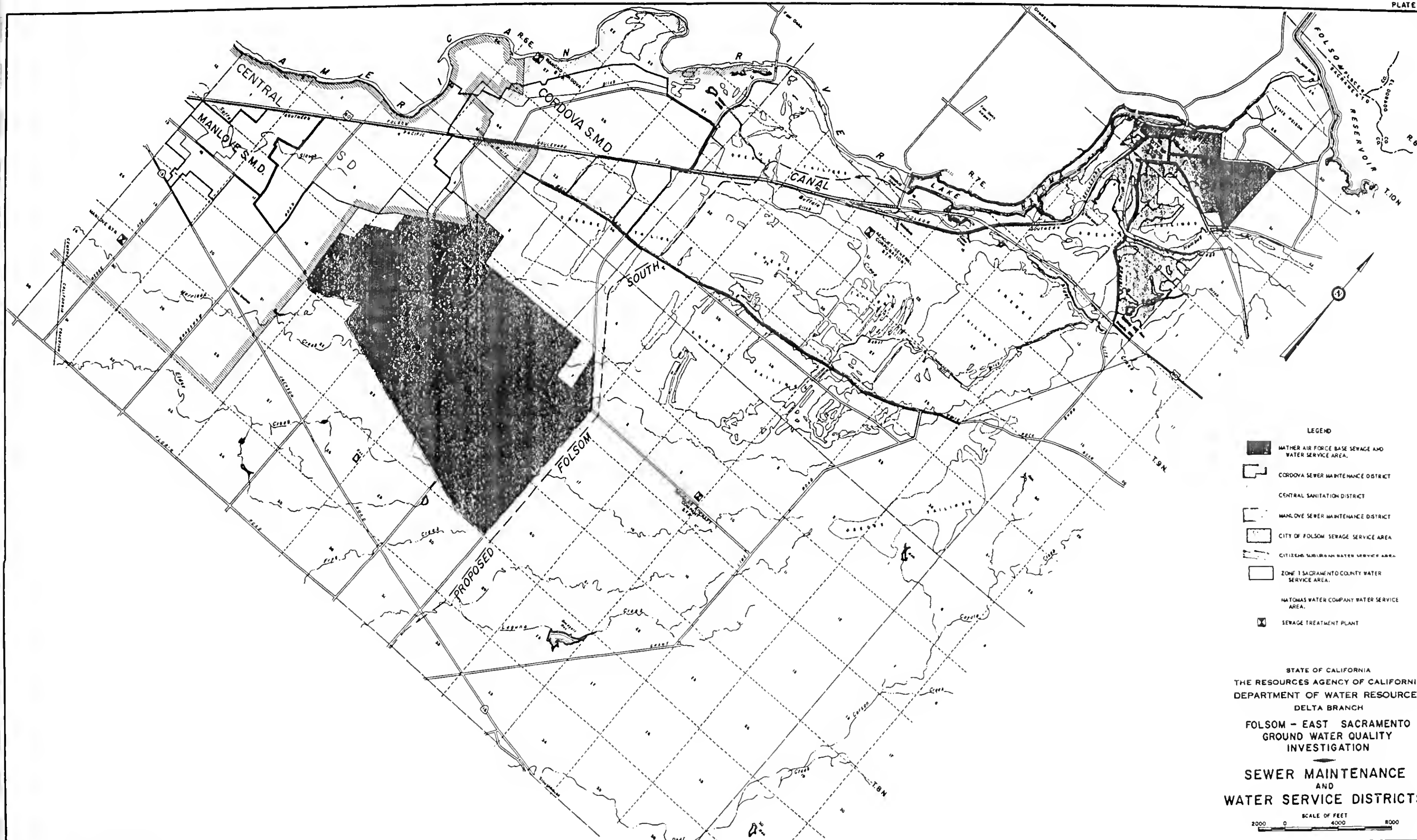
- MATHER AIR FORCE BASE SEWAGE AND WATER SERVICE AREA.
- CORDOVA SEWER MAINTENANCE DISTRICT
- CENTRAL SANITATION DISTRICT
- MANLOVE SEWER MAINTENANCE DISTRICT
- CITY OF FOLSOM SEWAGE SERVICE AREA
- CITIZENS SUBURBAN WATER SERVICE AREA
- ZONE 1 SACRAMENTO COUNTY WATER SERVICE AREA.
- NATOMAS WATER COMPANY WATER SERVICE AREA.
- SEWAGE TREATMENT PLANT

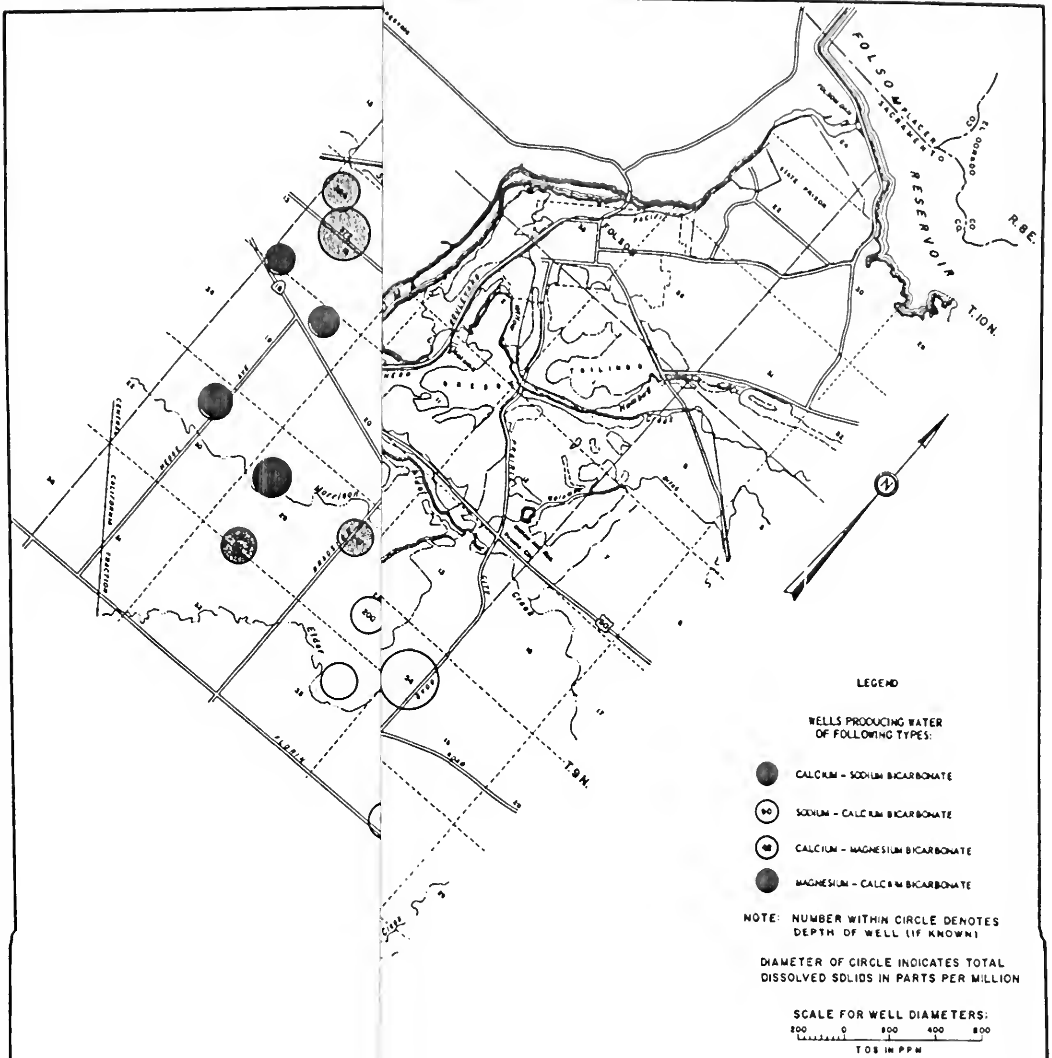
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM – EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

SEWER MAINTENANCE AND WATER SERVICE DISTRICTS

SCALE OF FEET
2000 0 4000 8000


AMERICAN RIVER
CENTRAL S.D.
MANLOVE S.M.D.
CORDOVA S.M.D.
SOUTH CANAL
PROPOSED FOLSOM
LAKE NATOMA
FOLSOM RESERVOIR
R.6E.
R.7E.
R.8E.
T.10N.
T.9N.
T.8N.
LEGEND
MATHER AIR FORCE BASE SEWAGE AND WATER SERVICE AREA.
CORDOVA SEWER MAINTENANCE DISTRICT
CENTRAL SANITATION DISTRICT
MANLOVE SEWER MAINTENANCE DISTRICT
CITY OF FOLSOM SEWAGE SERVICE AREA
CITIZENS SUBURBAN WATER SERVICE AREA
ZONE 1 SACRAMENTO COUNTY WATER SERVICE AREA.
NATOMAS WATER COMPANY WATER SERVICE AREA.
SEWAGE TREATMENT PLANT
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH
FOLSOM - EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION
SEWER MAINTENANCE
AND
WATER SERVICE DISTRICTS
SCALE OF FEET
2000 0 4000 8000



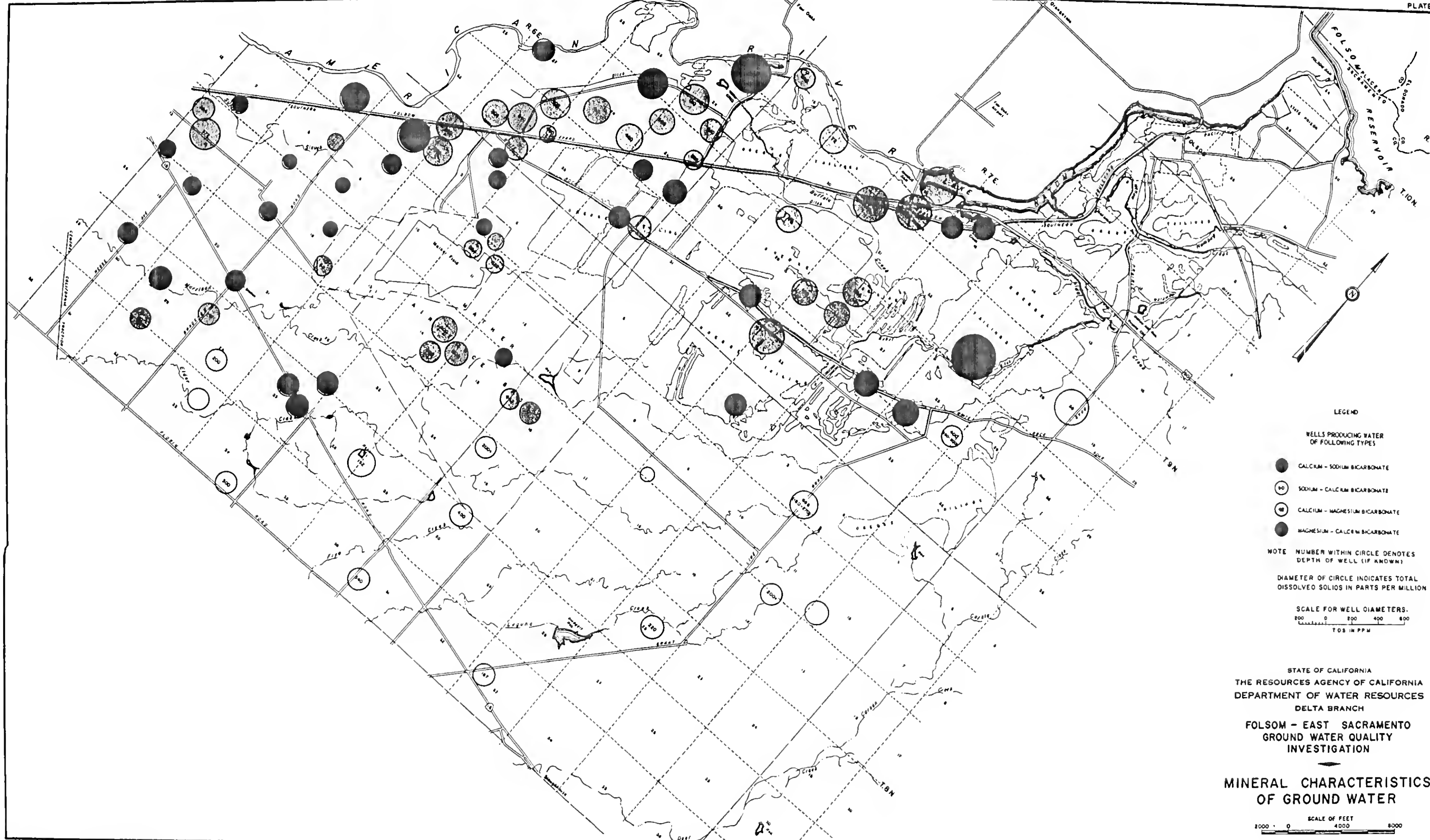
STATE OF CALIFORNIA
THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DELTA BRANCH

FOLSOM - EAST SACRAMENTO
GROUND WATER QUALITY
INVESTIGATION

MINERAL CHARACTERISTICS OF GROUND WATER

SCALE OF FEET
2000 0 4000 8000

PLATE II



DEPARTMENT OF WATER RESOURCES 1963

Printed By
DWR Printing Production
Services